Summit Introduction and Guest Welcome

Welcome everyone to the Gut Health and Longevity Summit. I'm so glad you're here, and I want you to take a deep breath right now, because what you're about to hear over these sessions could genuinely change the way you think about your health, your food, and your future.

Most people have never been told that one of the biggest questions in plant based nutrition is, can you actually get enough protein is. And that's one of the biggest questions when it comes to healthy aging and gut health.

And today's expert is here to change that. This is a conversation that I've been waiting to have because we're going to talk about what plant protein does for your strength, your longevity, and the trillions of bacteria living in your gut.

My next guest has spent decades answering the single most common objection to plant based eating. Where do you get your protein? She has delivered keynotes on this in 28 countries across six continents, and she's released a book testing this case with protein and aging.

Brenda Davis is a past chair of the Vegetarian Nutrition Dietetic Practitioner Group of the of Nutrition and Dietetics. She was inducted into Vegetarian Hall of Fame in 2007, and in 2022 became the seventh recipient of the Plantation Projects Luminary Award.

She served as a lead dietitian on groundbreaking, a randomized controlled trials on type two diabetes on the Marshall Islands. We're going to talk a little bit about that.

She has coauthored 14 books and published dozens of articles. And her newest plant powered seniors is one of the things we're going to dive deep into now.

Brenda, welcome. I have so many questions for you about protein specifically, and I know our audience. That has to. So let's dive in because this is like such a big yet important topic right.

So let's let's thank you so much for the first question. Absolutely. You're very welcome. I think that almost every plant based eater has been asked about this at least once.

Where do you get your protein? And you have spent your career answering that with real data? Where does that question fall apart scientifically, and where does it hold real substance?

So set us up for the stage of what we're going to be talking about today. Okay.

Plant Protein Basics and Protein Quality

Well, I you know, personally, I think the question falls apart when it automatically assumes that protein is synonymous with animal foods or that plant proteins are somehow incomplete or inferior.

I think what people need to know is all whole plant foods contain all nine essential amino acids, and many plant foods are very protein rich, especially in the legume family beans, lentils, peas, soy foods, but even nuts and seeds and many whole grains contain, you know, a significant amount of protein.

And, you know, we've known for decades that we don't need to carefully combine proteins. If we're eating a varied diet and we're consuming enough calories from our food, our bodies can just draw from amino acid pools throughout the day.

And, and and then, you know, in terms of the part about the question, you know, where does it have substance? Well, I think it has substance when we ask not simply, can I get enough protein from plants, but am I actually getting enough protein for my age, my activity level and my health status?

And you know, for most healthy adults who eat enough calories and reasonable variety of plant foods, getting enough protein isn't a huge concern. But intake can fall short.

And that's something we often deny in the plant based world. But it can fall short, especially for people eating very low calorie diets or highly restrictive diets.

You know, where they're not eating enough legumes, soy foods, not seeds, and and those kinds of foods. And then there are certain stages of life that require closer attention to protein.

For example, during pregnancy, lactation and for older adults. And so, you know, and then the other part of the equation is protein quality. It does matter.

But I think we actually need to broaden the definition of protein quality, because traditionally protein quality was judged by digestibility and essential amino acid composition.

And by those measures, you know, animal protein score very highly. Well, plant proteins are sometimes a little less digestible, especially if they're hiring fiber.

And they can also be low in particular acids. And so, you know, those kinds of issues are pretty easily addressed with adequate total protein and a variety of of protein rich foods.

But I think protein quality definitions have really failed. You know, they failed to factor in what the protein source does to our health over the long term.

Does the food supplying that protein increase or decrease our risk of of chronic diseases like cardiovascular disease, type two diabetes and cancer? And what does it do to our, you know, risk of premature mortality as well.

And when we widen that lens, the picture changes pretty substantially. So you know, if we look at large prospective studies, they consistently associate greater intake of plant protein, especially when it replaces red and processed meat with lower risk of of cardiovascular disease, type two diabetes, cancer and premature mortality.

And and you know, it makes sense because, you know, protein doesn't come to us in isolation. You know, food doesn't come in isolation. Beans, lentils, soil foods, nuts and seeds.

You know, package. You know, that protein, when it comes in those forms, is packaged with fiber and unsaturated fats and phytochemicals. Well, plant protein sources come in a very different nutritional package, completely devoid of fiber and phytochemicals.

And that's going to have a different impact on health. So, you know, to me, the highest quality protein is one that promotes and protects health while still meeting our needs for essential amino acids.

And viewed through that sort of broader lens, plant proteins really do the best. So, you know, and I think we can get into trouble at sort of both ends of the protein conversation, assuming we need loads of animal foods or protein supplements on the one hand, or assuming that because we're eating whole plant foods, protein is automatically taken care of and we'll never fall short.

So, you know, for me, the question is, and simply, where do you get your protein? It's are you getting enough protein from healthful sources to meet your individual needs?

And of course, thoughtfully planned plant based diets, you know, succeed in all of those realms? Yeah, absolutely. And I think you bring up a very important point here that we're eating.

But our cells, our body is not getting the nutrients it needs. So the question isn't like, okay, are we getting enough protein? But I'm also seeing that people are not getting vitamins, they're not getting minerals, not getting antioxidants, because we're not really eating the variety of food we need to be eating.

And instead we're actually creating inflammation from too much ultra processed food or too much of an animal forward diet. So let's talk about you. And if I could add, Monisha, a lot of people say we should be aiming for 30 different plant foods a week for gut health.

And in fact, you know, when I saw that, I thought, well, I'm just going to add up my numbers for a day. And I was up 58000 my God, you're the first person to beat me.

You're the first one to be out even looking at herbs and spices. So you're good. That difficult to do. It really isn't. And so we really do need to be thinking about fry and, and and thinking about growing some of our own foods, even if it's just a few mason jars with with sprouts on our countertop.

So it's and it's fun to kind of play with that. Yeah. No, no. Okay. So one, you've officially beat me because it's very easy for me to get 30 different in a day.

And I've stopped counting because it's like, literally my two meals will definitely have 30 plus. I have not gotten as high as you, but you're right about the gardening aspect.

Like, my mom is a gardener, so like, I was just up there and her garden is full of like zucchinis and eggplants and many people, like, I love okra. I'm an okra person.

Protein Needs for Healthy Aging

And most people don't know, like the okra grows up this way, like on like or asparagus the way like people have never seen like food the way it grows. So I get you.

So now in your book Plant Powered Seniors, you point to something specific. Protein stops being just a numbers game. And once you're making the case for healthy aging.

So what is actually changing when it comes to protein needs as we get older. And so basically it's like, why did this need a whole book to talk about it?

Because I can tell you right now when I'm working with individuals 40 plus, I'm like, what are you guys eating? And they're like, oh, I eat so healthy.

And I'm like, but your blood test and your gut microbiome tests, all of this is telling me you have no nutrition in your cells. So tell us what is changing as we get older when it comes to protein needs?

Yeah for sure. And just to clarify, the book is about all of the nutrients that we need as we get older. And it's about, you know, the various diseases and conditions of aging and how to manage all of that.

So it's a little broader than just protein. But protein is definitely an issue that we address quite deeply. And so first what changes. Well younger muscle is super responsive to the immuno acids we eat or to the protein we eat that get broken down into the acids.

But as we get older the response becomes a little blunted. And this is known as anabolic resistance. And it essentially means that in order to produce the same muscle building response as we have when we're younger, older people need a bigger stimulus, both from protein and from resistance exercise.

And at the same time, as we age, we tend to eat less. Energy needs typically decline, appetite often diminishes, you know, illness becomes more common.

And yet preserving muscle mass becomes increasingly important. So we're facing a bit of a paradox because we need fewer calories. But those calories actually need to work harder for us.

And that's that's one of the reasons that a lot of expert groups recommend more than the adult RDA of point eight grams of protein per kilogram body weight for older adults.

And there are several countries that actually have separate order's for for seniors or for people 70 plus. We don't in North America yet, but still most experts recommend a target of around 1 to 1 point 2g/kg body weight for healthy older adults and and 1.2 to 1.5 during illness recovery, or if a person has malnutrition or certain chronic diseases.

So but when you know, this is where protein stops being sort of just a daily number, how it is distributed throughout the day also matters. So we we're concerned about total protein intake, but we're also concerned about, you know, how it spread throughout the day.

As our muscles age. They respond better when we provide a meaningful amount of protein at each meal, rather than like what a lot of people do is they have very little at breakfast, maybe modern amount at lunch, and most of their protein comes at dinner time.

And, and, you know, so once we actually figure out how much protein we need, then if we're eating three meals, we would want to divide that number by three and have a reasonably consistent amount at each meal.

And so, for example, someone who needs 75g of protein would be aiming for about 25 per meal. And if that person's including a snack, they could aim for 20 a meal and 15 at their snack.

And we also want to ensure essential amino acids, especially leucine, because that's especially important for protein, you know, for what we call MPs or muscle protein synthesis.

So for people eating plant based diet, you know, a plant based diet, this really means being more intentional with our protein intake. So protein rich plant foods like beans and lentils and soy foods like tofu and tempeh and edamame peas, Satan, you know, nuts and seeds, protein rich whole grains.

You know, these foods should really be featured at every meal. And it's also helpful. A lot of people drink almond milk or oat milk or, you know, some of the lower protein nondairy milk, sorry, milk is much higher protein, but it's also higher in other nutrients as well.

So it makes sense to think about, you know, switching from whatever nondairy milk you're using to an unsweetened or, you know, fortified soymilk. And then the other thing that is really important to mention is resistance training, because it may even need to be to go ahead of, you know, the whole conversation about protein because we can't eat our way to strong muscles.

Protein, you know, literally provides our building blocks. But resistance exercise provides the signal that tells the body what to do with those amino acids.

And so we need to be resistance training probably 2 or 3 times a week. So to me the message in plant, you know, plant power seniors isn't older. People need enormous amounts of protein.

It's more nuanced. We need enough protein from healthful sources, distributed reasonably well throughout the day. And we need to give those amino acids a reason to go into muscle by using our muscles.

So and, you know, preserving muscles isn't just about bodybuilding. It's about preserving strength, mobility, independence, all of those things, and to keep doing all the things we love.

So all of those and I should also say, Doctor Monisha, that the book that I wrote before plant powered seniors was plant powered protein. And so so we looked at, you know, we looked at people at every stage of the life cycle in that book.

So let's give people a little bit more concrete visual on this. So if we use like an average, say 150 or 160 pounds, say 160 pound woman and we're giving her 25g of protein, she's eating three meals a day, so 75g of protein a day and she's not snacking.

What would a breakfast, lunch and dinner look like? And I think this is really important because I do notice that some of my older patients, they will just skip meals altogether.

They'll forget to eat, then they'll sit down, like you said, and have dinner and be like, well, now I'm too full to eat too much, right? So they're not getting enough nutrients.

So what would you like? Or we can even say, what are you eating to get your your protein throughout the day? If we want to not have it at the end of the day, what are some examples?

Yeah. So it's really easy. I you know, I've dealt with a lot of women who whole food plant based diets, their diets are, you know, very healthy in terms of, of variety and having, you know, choosing unprocessed foods or minimally processed foods and all of that.

And they're coming in at 35 or 40g of protein, and they're starting to see symptoms of things like, you know, their skin breaks and Terry's easily their hair is falling out.

They you know, these some of them even notice, you know, enlarged abdomen and things like that, which is shocking to me. But anyway, they I take them from about 35 or 40g to 60 or 70g, depending on the body size.

And this is a really important point. It's not your requirement is not based on your actual weight, it's based on your healthy weight. And so if you weigh 160 pounds, that's a very good point.

Weight is 130 pounds. You base your protein needs on 130.

Meal Planning for Adequate Plant Protein

Same token, if you're if you're underweight, you're basing your needs on your healthy body weight, not your actual weight. Why is that? Explain that. Because I'm recalculating my protein as we speak now.

Yeah. So so it's very simple. Fat doesn't require the same amount of protein as as muscle. And, you know, just your general maintenance. So what you need is, is what your healthy body would need.

You don't need extra because you're carrying an extra 30 pounds of fat. If you're underweight, you don't want to base your needs on your actual weight because you need more protein to get to your healthy body weight.

So that's, you know, that is simply explains that. But getting to, you know, what do I do and what can people do to increase protein. So let's take you know, I'll take what I eat in a typical day, but I'll also, you know, explain what people how people often eat versus, you know, the things that I do to get my protein to where it needs to be.

So for breakfast, my breakfast is, you know, this morning it was, you know, berries, quinoa and lentils. I cook whole grains and lentils together as a base of my breakfast bowl.

And then I add a chia pudding that I've actually blended hemp seeds into using soy milk. So I'm boosting protein even further. And then I add the and I sweeten it with prunes like I, you know, that's blended in.

So I, you know, do it that way. So it's all cool foods and then lots of berries and fruits and, you know, mixed seeds and nuts and on top and, and maybe even a little my dehydrated granola.

And I always consume it with soymilk, which has about eight grams of protein per. Compared with Allman, that might be one. Some melts are around four, but but some still around double that.

And so my breakfast easily provides 25, you know, 20 to 25g of protein. Now, if someone's having a bowl of oatmeal with almond milk and a few berries on top, maybe a sprinkle of flax seeds, they'll be under ten grams of protein if they're consuming that with almond milk.

But just by adding a couple tablespoons of hemp seeds and soy milk, they're adding another 15g of protein just just like that. So it's it's actually pretty easy to get to where you need if you add things like hemp seeds and soy milk and then lunch.

My lunch is always, almost always a giant salad. And so I use all sorts of different greens, herbs, sprouts, and then every color of the rainbow. I try to get every single color of vegetables and fruit into that salad.

And then I always add some sort of either grain or starchy vegetables. So it might be little, you know, butternut squash cubes or sweet potato cubes or quinoa or something like that.

And then I add protein and it's often two different types of protein. So today I had avocado. But often I have a little home, almost always have tofu.

So little tofu cubes and sometimes chickpeas, sometimes other, you know, edamame, things like that. And then my salad dressing is never like these free sugar based dressings.

I would never want to put that on my salad because two reasons. One, I actually want my dressing to enhance the absorption of the nutrients from that salad.

There needs to be some fat there. I always choose a fat source on top of my dressing as well. So today I do have a. I may have some pumpkin seeds, but I'll always choose at least one.

And then in my dressing it's almost always tahini and hemp seed base. So teeny and hemp seeds blended with lemon juice and garlic and ginger and all of those kinds of wonderful things.

And and so what you're putting on your salad adds nutrition, but it also adds healthy fats that help you to absorb those really important phytochemicals and fat soluble nutrients.

And and then, like today, I have to admit, I really like to have some sort of treat. Often it's just a piece of fruit, like an orange or an apple or something like that.

But but today I actually I'm one of my very favorite trees is I freeze a banana on a stick, then I roll it in some sort of nut butter, and I take like an 85% chocolate and just do a little, you know, swirl of the chocolate and then quickly roll it in nuts like walnuts and seeds.

I love the seeds and then refreeze it. And that's one of my very favorite treats. So I love treats, but they're nutritious treats. And then dinner, of course, is, you know, often being or lentil based.

Tonight I'm having an egg plant chini fresh tomato dish that has lentils in it. And you know, I have that with a little bit of kale salad or something like that.

So that's a very typical dinner. I like chili and stir fries. I love bowls with, you know, quinoa and then all the steamed vegetables and then the protein on top with a nice spicy peanut sauce.

So those are the kinds of things that I would do. But at each meal. So for lunch you want to think where where is my protein. So adding the tofu cubes adds about 15g easily.

It's only like even just a third of a couple of them. And so the etymology. The even the dressing I'll add some protein, pumpkin seeds and so forth. And then at dinner, there's always some sort of legume feature.

And, you know, sometimes we even have a little bit of veggie meat. If we're doing going for a barbecue, we'll bring

a veggie burger or something like that.

It's not a regular feature in the diet, but it can play a role. And these are also very concentrated protein sources. So, you know, that's kind of how I do it.

And I just think about even when I'm making a pudding like a pudding, I would use a protein rich milk instead of Ormond milk or something like that. Yeah I probably have sway throughout my day.

So I'll usually do a milk latte. And then for lunch today I had lettuce wraps with tempeh and quinoa and then all the veggies on it. And for dinner, I've got a wedge salad with the rainbow color of veggies and a block of tofu baked tofu.

So and I'm adding the hemp seeds just to get that extra ten grams to that. That's right. So let's talk about gut health. Right. So protein doesn't just affect muscle.

It also affects what's happening in the colon. So what does research show about how plant protein versus animal protein shapes the gut microbiome. Well I just find this area so fascinating because of course when we eat protein, we're not just feeding ourselves.

We're we're feeding our microbes. And so, you know, most dietary protein is digested and absorbed in the small intestine, but some protein and nino acids will reach the colon where bacteria metabolize them.

And what happens there depends sort of partly on what else arrives with that protein. And they're they're really two broad types of fermentation. The first is sacroiliac fermentation.

It's it's simply microbial fermentation of carbohydrates, especially fiber and resistant starch. And it's this type of, of fermentation that produces short chain fatty acids like acetate, propionate and butyrate.

And butyrate is especially important because it nourishes the cells that line the pole, and it helps support a healthy intestinal barrier. The second type of fermentation is proteolytic fermentation.

And this is, you know, microbial metabolism of of proteins and amino acids. And it's a normal part of gut metabolism, too. And I don't want to suggest that everything it produces is harmful.

But some amino acid metabolites, you know, are not so great, somehow beneficial functions. But but when we eat a large amounts of protein, the environment, it produces an environment that's really short on for mental carbohydrate.

And we see greater production of compounds like ammonia and phenols and sulfur containing metabolites that in excess could have less favorable impacts.

And this is where I think the protein package becomes really critical as a state gives protein, but it doesn't give any fiber. Phytochemicals. Whereas a bowl of lentils lentils will give us protein along with the fiber and resistant starch and the phytochemicals.

And so while we're providing amino acids for ourselves, we're simultaneously providing fermentable carbohydrate for our microbes. And the same principles apply to other whole plant foods like beans and piece and soil foods and nuts and seeds and all of that.

And along with protein, they bring fiber and, you know, pretty impressive array of phytochemicals. And so that combination tends to support a mars environment and the production of beneficial for chain fatty acids.

And then our microbes can respond really quickly to dietary changes.

Plant Protein and Gut Microbiome Health

So when we compare very plant rich versus very animal rich dietary patterns, we can see shifts in microbial communities and microbial metabolism within, you know, a few days.

So the big question to me isn't simply is, you know, is this plant or animal protein. It's what does the protein actually come packaged with. And you know, I think that's the greatest advantage of one of the greatest advantages of getting our protein from plants, because then we can feed our muscles and our microbes all at the same time.

Yeah, absolutely. So with that, so what you're saying is that same food that builds muscle also is feeding the bacteria that is protecting our gut lining.

And I think that's the part that most people are missing when it comes to plant protein. I feel like there is a trend right now going around about eating only protein and so much protein.

So we're talking about over 100g, 120g, 130, 150g, whether that's animal or plant based, the conversations about eating excess protein and there's only so much individual can eat in the day.

So when you do that, you're eliminating some of the other nutrients like fruits, vegetables, whole grains, all that kind of stuff. So when you wrote your book on plant protein, did you see any research on what excess protein does to the body like?

Because the body can only convert so much? I mean, I know I wrote it in my book, so I'm just curious what you put in your book. If we if we eat more than our body can handle.

Yeah. I mean, if we eat more than our body can handle, it gets. And if we're eating more, more calories from protein than we need, it gets converted to, you know, storage forms of calories.

So it gets converted to fat and gets stored. It doesn't go directly to the muscles to build big muscles. It just, you know, let's let's just repeat that because it did have a loss of a little bit of signal.

So when you eat excess protein requirement then your body requires that same protein can turn into fat not into building muscle. Is that correct? Absolutely.

So we have to do something with the excess. I mean, if you're doing a lot of resistance training, you'll use a fair bit of protein. But, you know, even even with that, if you eat excess calories, the body has to store those excess calories.

So of course, to store excess protein, we turn it into fat. And, you know, shuttle it to our unlimited ability to store, you know, calories and adipose tissue.

And sometimes, you know, and this isn't a good thing. Sometimes we exceed our capacity to be shuttling this stuff to, to our adipose tissue. And it gets shuttled to places like our liver and, and, you know, our vital organs.

And when it does that, it it impacts metabolic health hugely in a very negative way. And so we don't want to be over consuming anything in protein included.

And then of course, depending on the source of protein, over consuming protein for some people may mean over consuming red and processed meat, which we know is a risk factor for cancer.

And it can increase our risk, especially of colorectal cancer. And and then there's just all sorts of negative impacts, because that package is sometimes very rich in saturated fat, increasing, you know, insulin resistance and doing all sorts of nasty things in terms of blood cholesterol levels and so forth.

So, you know, but even if we're eating, you know, our protein from relatively healthy sources, if we eat too much, it's still going to get converted and stored.

Yeah. Yeah. All right. So you are the lead dietitian on a randomized control trial, reversing type two diabetes on the Marshall Islands. What did that work teach you about protein, whole plant foods and metabolic disease that you couldn't have learned from a lab alone?

Well, you know, I the Marshall Islands was a very rich and rewarding experience. It's a very different culture. And I you know, I think what it taught me most was that nutrition science only becomes powerful when people actually live it.

And, you know, and it was, you know, it was a marshallese underwent an extraordinary nutrition transition over the years because they, of course, traditionally lived on whatever grew on the land and whatever they could catch from the sea.

So it was mainly things like coconut, breadfruit, taro, pandanus, you know, those were key foods. And of course, whatever, whatever seafood they, they could get.

And then, you know, they became very urgent. People shifted to living mainly on two islands. And, and there were too many people on the island to rely on local foods.

So they started to import cheap foods because they're quite poor. And, and so things like sticky rice and, and, you know, meat, especially processed meat like spam and chicken and ramen noodles and donuts and pancakes and their favorite beverage, you know, it's called luau.

And the number one ingredient is high fructose corn sirup. And one of the things that shocked me when I, when I lived there for eight months doing this research, was the kids.

One of their favorite snacks was dry ramen noodles, and they would pour Kool-Aid powder on top for flavoring. And I even once saw a kid putting this white powder on top.

And I asked this Marshallese that I was with at the time, what are they putting on the Roman noodles?

Excess Protein and Metabolic Health

And they said, oh, that's a cinnamon toast, which is pure MSG. So, I mean, I couldn't design a diet to induce diabetes any better than the diet they've adopted.

And in fact, you know, they have one of the highest rates of diabetes in the world because they're genetically designed to withstand famine. And here we are.

You know, here they are with all of these ultra processed, hyper palatable foods. And so and, you know, whole plant foods, especially legumes, vegetables, whole grains are really minor players in their in their diet.

And, you know, our intervention participants were averaging about 5 to 10g of fiber a day before they came into the study. And so, you know, when we introduced a diet centered around whole plant foods, these foods weren't particularly familiar to the people.

And yet the people loved the food. They had no preconceived notions of tofu or beans or anything like that. I remember once funniest thing, we made a bean dish and we did include coconut milk, which we make using their local coconut and squeezing it and but anyway, I I'll never forget one woman who had never eaten beans before tasted them and said, these beans are as good as ice cream.

And I was just like, doesn't get any better than that when somebody says something like that. Especially people that love ice cream. And, you know, it was pretty cool.

And people, you know, the changes that we saw weren't just in in blood tests, like we, you know, people could could really feel them. So constipation was extremely common.

In fact, we had people, you know, generally averaging 1 or 2 bowel movements a week. We one of the guys in our first intervention had not had a ball movement for 13 days.

And yeah, just brutal. And then suddenly here they are eating 40 or 50g of fiber a day on the program. And you know, they started, of course, having bowel movements every day.

And some were actually worried about it because it was so different from what they considered normal. And we had to reassure them that they were going to be perfectly fine.

And it was actually a really positive change. And and so, you know, just just unbelievable. We didn't measure the microbiome directly. So I can't tell you exactly what what changed.

But but we you know, we profoundly changed the organisms that were available.

Marshall Islands Diabetes Trial Insights

If you're changing about movement from once a week to every day, that is going to change the microbiome in a positive way and the trajectory of their health in a positive way.

Solutely and, you know, we saw an incredible changes in their metabolic health. By by 12 weeks their a onesie had fallen an average of two percentage points.

And fasting glucose was down about 72mg per deciliter in the first two weeks and about 45 by three months. And, you know, insulin resistance improved, you know, all their measures of metabolic health improved.

And it wasn't even just about blood sugar. We saw changes in way, way circumference, triglycerides, blood pressure, insulin resistance, inflammation. You know, HSC, AAP fell about 2mg/l in the intervention group with at 12 weeks.

So and 23% of our participants who had a baseline, a one C under 9% actually achieved remission in the study. So when I say we changed the metabolic environment, I really mean that we we weren't manipulating one nutrient or one biomarker.

We change, you know, carbohydrate quality, fat quality, fiber intake, protein sources, energy density, all of those things. And, and those combined changes and the added physical activity and other lifestyle changes just transformed their lives.

And, you know, and that kind of brings us back to protein. We weren't just replacing animal protein with plant protein. We were changing the package that the protein came in.

And and, you know, adding the fiber and resistant starch and micronutrients and phytochemicals and and so, you know, we really need to to be thinking about that.

And I think, you know, one of it's one of the biggest lessons that we learned from the Marshall Islands. And nutrient doesn't walk into the body alone.

It kind of arrives as part of a bigger, you know, package and an entire dietary pattern. And so, you know, another thing that that I have to mention is participants consistently told us they experience less pain, less disability, clearer thinking, better sleep, and of course, way less constipation.

And they discovered new foods. They felt different. The clinical markers improved so much. And medication it was, you know, 60, 70% less medication that they needed.

So it was a pretty profound experience. And, you know, I you know, I feel really honored to have been part of it. And and I, I just, you know, I just admire what the people were able to do there so much because it was so foreign

to them.

But many have actually retained a largely plant based diet. Many still eat fish, which makes sense because they live on an island and that's easily accessible and it's you.

No good food for them. So it, you know, but they eat way more plants than they used to, that's for sure. Okay, so here's the question. Did you try spam? No.

You couldn't pay me to try spam. My gosh, when you got the the sodium and the fat content of spam, it is unbelievable. And I think it's why people get so addicted to it.

Because it's like a half a can is like 4000mg of sodium or some ridiculous thing like that, and that you're exceeding your upper limit for the day. And at one serving, it's just it's quite an interesting food, I must say, I must say.

Very interesting. All right. So now there's an entire industry built around plant protein, protein bars, fortified protein snacks. I'm even seeing, like, you know, like snacks, saying plant protein now.

And so they're marketed as an easy fix. And as someone who has spent decades in Whole Foods plant based nutrition, what's your honest take on those products and what would you tell something?

Tell someone who's reaching for one of those instead of reaching for food? Like, what do they need to be aware of? Well, they need to be aware that it's not just protein that's coming in that package.

There's often a lot of sugar, a lot of fat, you know, flavors, colors, whatever. And so this is a very highly processed food just because of food has, you know, proteins flashed across it.

And we've always put a bit of a halo on protein. It doesn't make it a healthy food by any stretch. To the imagination. My preference is always food first when I lentils, tofu, tempeh, and mommy, all of those kinds of foods.

I'm not, you know, just getting protein. You're getting all of the other things that come with it. And but, you know, all of that having been said, I don't think we need to always Pooh Pooh protein powders.

And, you know, we don't have to put them in a camp that, you know, never consume them. Because even though it's much more isolated food, it you know, it it delivers protein very efficiently.

And sometimes that can be really helpful for certain people. And that's especially true for, you know, maybe for some athletes, for older adults, it can be true, especially someone who's frail, recovering from illness, struggling to maintain their weight, or they just can't eat enough to meet their protein needs.

A protein powder, you know, can can be, I think, useful. And, you know, I become concerned when the supplement industry convinces healthy people that they need all of these protein, you know, bars and powders and all of that.

It, you know, adding protein, as I mentioned, doesn't make a food healthy. And and, you know, the, you know, you just want to ask yourself, do I actually need more protein?

And if you do ask yourself, what's the best way for me to get it? And if you can meet your needs with Whole Foods, it's really ideal because you're getting so much more than just protein.

But if you're still falling short, you can you can consider protein powder as a way to close the gap.

Protein Supplements and Practical Takeaways

But if you do, quality matters and you know you want to choose a relatively simple product from a reputable company, I would say that independently third party certified for purity and contaminants such as heavy metals, we

don’t necessarily need a long list of fillers, sweeteners, colors, herbs.

You know, all of those things. I you know, you just want a product that delivers good quality protein cleanly and simply, and most people don’t need it.

I have never used, one of those products in my life. I just it’s just unnecessary for me. Protein bars, I think, require a lot more scrutiny because they vary hugely.

Some are reasonable convenience foods, but others are candy bars with added protein. And so you know, you want many are. Yeah, many. And you want to look beyond that sort of protein number on the front of the package and look at the ingredient list because you want to see what it contains.

And if it’s, you know, sugar and fat are the first two ingredients, it’s probably not a good plan to be buying that protein bar. So, you know, sort of in summary, Whole Foods should build the foundation.

Protein supplements can fill gaps if absolutely necessary. And, you know, for most people they’re not at all necessary. So last question, and I want this to be concrete because someone listening that’s spent years worrying about the can’t get enough protein, especially without meat.

And because, I mean, just like you, I have this conversation all the time. Like I just can’t live without it. And they worry alone that they can’t get enough without with just eating plants.

What is the one thing you would tell them to do this week? And let’s be specific, what should they do this week? Well, boy I there’s several things I can I say okay I’ll, I’ll let you do three, I’ll let you do three things.

Yeah. Because I think the first thing they need to do is assess how much they’re actually eating. So because a lot of people are surprised when they calculate the numbers, they’re actually surprised how much they’re getting.

And so I think that’s step number one. Know how would you calculate it. Like I know how I calculate it. You can just use one of the programs online, the free nutritional analysis programs that that’s probably the easiest way for most people to do it.

And then number two is you want to boost your intake of protein rich plant foods if you’re falling short. And so you’re just making some simple swaps like using mouth instead of almond milk, using adding lentils or beans to suit, putting tofu or tempeh or edamame on your salad, adding hemp seeds to your dressings, things like that.

And convenience counts. You can, if you know having a plant based meat alternative or protein powder helps you to reach those needs you. You know it’s reasonable to to include those on occasion.

And then the other thing, the third thing I would say is to think about distribution you don’t want at all at one meal. You want it spread across the day.

So, you know, assess it, boost it and spread it. That’s great. I’m going to add a 1.5 in between there because I think this is this is a key point that you mentioned earlier is once you calculate it based off of your healthy weight, not your current weight, I think that is a key.

So we got one. We got 1.52 and three. Okay. Perfect. Brenda, this has been genuinely reassuring. The idea that protein was never the reason to avoid plants and might actually be the reason to eat more of them, is a message that I want everyone to carry with them today.

Brenda can be found at Brenda Davis, and I encourage you to look up all of her books, her library books on plant based nutrition. And I think the key takeaway for the audience today is protein was never a reason to avoid plants, and it might be the one reason to eat more of them.

So thank you so much Brenda and everyone else. Stay tuned for another episode. Thank you so much, doctor. It

was really wonderful to be with you. And I think if I could say one last thing, it's that, you know, the benefits of moving towards plants and choosing plant protein rich foods extend so far beyond ourselves.

They have, you know, the ability to lighten our impact on the planet and reduce suffering for animals. And, you know, so it's it's like a win win win.

With every meal, we have the opportunity to nourish ourselves, protect the planet, and extend our circle of compassion. Absolutely. Thank you so much, Brenda.

Thank you, doctor Monisha. Take care.