Introduction and Guest Background

Welcome to the Parkinson's Solutions Summit. I'm your host, Dr. Ken Sharlin We have a very special guest today, Dr. Andrew Freeman. It's a board certified cardiologist, soon to be professor of medicine.

Looking forward to hearing even more about that. And really a pioneer in lifestyle medicine, heart disease, diet, exercise. And I know we're going to have a lot of really important stuff to talk about.

So I'm going to dive right into it. Dr. Freeman, welcome to the Parkinson's Solution Summit. Well, thanks so much for having me. It's exciting to be here and, look forward to our discussion.

Dr. Freeman, some of you told me a moment ago that was really kind of part of your career from the onset is, something called walk with the doc. Is that right? walk with the doc.

And maybe that's just a great way to segue into all the important cardiovascular topics that relate to Parkinson's disease. For sure. I think what you've probably found over the years talking to folks like me, is that lots of disease states overlap.

And, the truth is the the underlying disease may be in part genetic. but really, it's the environment we all live in. And that's where lifestyle medicine is so very powerful.

And the root cause for all disease is inflammation. And if we can figure out a way to control inflammation, we can often control lots of diseases. even in the neurologic space, which many people will find challenging and difficult to believe.

But, one of the big ones, of course, is exercise. We always hear that we should exercise more. And, you know, we always feel like we're not doing enough.

And what I always tell people is exercise is truly medicine, and it is the fountain of youth. And as we get older, we have to exercise more in order to maintain that benefit.

And so one of the ways, one of the things that I thought was frustrating was we would say to our patients, hey, you need to go exercise. And they would say, sure, doc, I'll do that. And they come back.

Walk With a Doc and Exercise as Medicine

Hey, are you exercising? No, I need to do that. And then, you know, I need to do that. So when I was in fellowship, a guy named Dr. David Sabbagh, a cardiologist in Ohio, started a program called walk with a doc, which, of course, sounds like a no brainer.

But, you know, similar to the way people operate when they, you know, save for retirement, right? Some of their paycheck automatically gets put away for retirement.

People need a sort of automatic mechanism to help them get to a place where they can, you know, exercise regularly. So it's a program designed to walk with patients.

There's no co-pays or any of that annoying stuff that we all hate. we meet on a Saturday morning. We usually have healthy breakfast. and then we walk around a park.

And before we do that, we usually talk on a health topic, and it can be really anything. And it is a really powerful program. We've been running it for about 14 years here in Denver, where one of the original chapters that started,

and it's been lovely and we have really, moved the needle.

We've touched a lot of Denver citizens. We've gotten a number of other chapters started in the Denver metro region. We probably have it have had 8 to 10 up and running at any given point in time.

And now we're in the range of 4 or 5, and then all over the state, we have quite a few as well. and it's been a really rewarding program. And for those of you, our listeners that are physicians or medical people, it's a great way to combat burnout, right?

Because one of the things we hate is when we can't see improvements, when someone else is telling us how to do things. and it's a nice way to just recharge and be a normal human being with your patients without all the formality of the hospital setting or the clinic setting.

it's just nice to see where they are. And the results are truly amazing. So, really important part of what we do and the nice thing about walking is not only is it anti-aging and high blood pressure and anti-cancer, it's usually combats a number of neurologic diseases.

and it's also fantastically good for your mind, meaning it is one of the most potent antidepressants that has ever been invented. So. Yeah. Oh that's wonderful.

And I love the fact that you have these chapters, so maybe people can. Is there a place where they can go and actually find their local walk with the doc?

Yeah, walk with a doc.org, is the national website. And then you can often find if you type and walk with a doc in your city or one of the bigger cities in your neighborhood, in your region, I should say.

Then you'll probably find your chapter. and we have some patients who actually go to all the walks they can handle. and it's nice because they have a place to go every week, so.

That's really great. You know, we could probably spend the whole time talking about this, but I. And we won't. But I, am so impressed with that because, in part not only is it, of course, emphasizing movement, which as you say, is medicine, no question about it.

It creates community. And community is such a powerful thing. I'm sure friendships are made. people look forward to their walk, and connecting with their friends, their doctor, their colleagues, their support.

and that right there releases all kinds of warmth. Even the thought of going, that desire to go, the drive to go. Hey, today's my walk with the doc day.

really itself has therapeutic benefit. And then I love the fact that, you know, this is being headed up by someone and no pun intended, who really does walk the walk, right?

you know. Exactly. That's exactly at. The, our best, our best selves as physicians. Well, cardiovascular disease, and as you pointed out, neurological disease overlap tremendously.

we know that people who are ultimately develop Parkinson's disease. If we look back in the medical history, there's a disproportion, of abnormal cholesterol.

I'll just put it that way. For people to understand dyslipidemia, there is insulin resistance, high blood pressure. So these are not just major risk factors for heart disease, but they're major risk factors for neurological diseases, including, importantly, Parkinson's.

and then it turns out that if you have Parkinson's disease, you're at a disproportionately higher risk for cardiovascular events. And that's not just heart attack or coronary occlusive disease.

It could be heart failure. It could be cardiac arrhythmias. Right? it could be the consequences of orthostatic hypotension.

Cardiovascular Risk and Parkinson's Overlap

and so really just, you know, rather we're providing information here, but really want to emphasize how important this discussion is in terms of what you can do about it.

When we see it both leading into as well as being a consequence of Parkinson's disease. Yeah, I mean, there's so many overlapping things here. I mean, first of all, Parkinson's disease can come on as you know it, pretty much any age, but also affects people disproportionately who are older and of course, the number one killer of people the United States remains coronary disease.

Heart disease. and I always said, you know, find it, challenging when somebody has managed to get their Parkinson's really well controlled and then of course, unfortunately suffers a heart attack or a cardiovascular event that could have been prevented.

So I think there's that concept, but there's actually been real data that shows that lifestyle modification improves outcomes in Parkinson's significantly.

not only exercise, but also with diet and a lot of that has to do, I think, with inflammation, the root cause for all disease. and then I think a lot of it, is really powerful.

And it's interesting, you know, historically speaking, if you go back in time, many of your, listeners may be familiar with another neurologic condition called multiple sclerosis.

But there's a very famous doctor out of Oregon called Roy Swank, who was treating his patients at the time with a low fat, wholefood, plant based diet with amazing results, even cure, and some of the Ms.

cases. So it's not surprising to me that, you know, when you eat better and you put your body in a healing environment that, you know, all sorts of neurologic disease improves.

And we know that lots of people, particularly as they get older, but just by virtue of being American and growing up with all the American gobbledygook we all grow up with, we suffer from, high blood pressure and high cholesterol and sleep apnea and diabetes.

And all of these things tend to compound, particularly as we get older. So bottom line is I think there's a lot of overlap. And I think the healthy lifestyle we live will protect us against many diseases and make many diseases we have better.

Or even if you're lucky, quiescent, which means that they're in remission. Right? They're quiet. so I hope that answers the question. Yeah. Most definitely.

Well, it's certainly, definitely so. And a segue into a deeper discussion. You know, there was a paper that came out not too long ago that basically it was a little oversimplified, but it said that individuals who were taking a multivitamin every day, it turns out, were at lower risk for developing Alzheimer's. Now, that's a good idea.

That sounds good to me. Take a multivitamin. But as a doctor who practices lifestyle medicine and neurology, I would say that. What does that really tell us is that even the smallest steps toward improving nutrition can make a difference.

Should we stop there? Probably not. But I have a lot of patients who, start taking a multivitamin after seeing me and that step alone. That simple first step.

That's what we call a smart goal, right? As you know, specific and measurable and achievable and realistic and

time based make they come back to. I felt so much better.

I felt so much better. Tell me about so we've, Yeah. Please. Yeah. No, I was just going to say so I think a multivitamin is certainly helpful when people are not eating well to begin with.

one of the things that I often will talk to my patients about, you know, they ask me about what supplements to take. And I said, well, remember that eons and eons of human beings have survived without supplements because they were eating well.

Right? All the brightly colored fruits, vegetables, etc.. So I think the multivitamin, in a lot of ways is sort of the gateway, if you will, to healthier living, which is a great, segue.

Lifestyle Medicine, Multivitamins, and Nutrition

I think a lot of patients don't realize how impactful nutrition is. And, you know, where I grew up in the East Coast, in New York, and I trained in Philly and Rhode Island and all these places.

Nutrition is just like an afterthought, right? It's sort of like, oh, I'm hungry. I'm going to go get a cheesesteak or I'm hungry, I'm going to go get a cookie or I'm hungry, I'm going to go get a whatever.

And we don't even think about how that might impact you down the road. I mean, one of the things I always laugh about, right? So I go to Costco all the time because I love their produce.

But that dollar 50 hotdog that's available at checkout is probably killed more patients than I could ever have imagined. And I sure wish, that somebody would put a warning sign that says warning.

This is in the same category of cigarets. Please consume at your own risk. But one day. One day. I always quote Michael Pollan. you know, about edible food, like substances.

not to mention his emphasis on more of a plant based diet, of course. But, that is that is definitely a huge, huge problem. So breaking things down for us, you know, most doctors are not getting the education in nutrition.

This is something that you realize that you needed to bring into your practice. How did that happen for you? Yeah. You know, it was an interesting story.

you know, like, every good training, you know, we sort of conform to whatever it is that we are taught, and we spend a lot of time with, you know, figuring out how to diagnose various diseases and then figuring out how to treat most diseases with either a medication or surgery.

you know, and there was a superficial, you know, mention of lifestyle that nobody really went into. So like, every good, you know, fellow training, etc., I spent time learning and honing those skills and mastering them.

And I came out to, practice here in Colorado. And I started the walk with a doc program, which I was really proud of. And realized that there were still more I didn't know and more lifestyle that could be so impactful.

and, we were on a family vacation. I started reading lots and lots of books in the space, and I remember vividly we were in a family vacation in steamboat.

I was eating a burger. and then I finished that night, the book, The China Study and I've Been Plant-Based ever since. And one of my great colleagues and mentor, former president of the American College of Cardiology, a guy named Kim Williams.

he has a really a couple of famous sayings that you may have heard. but he says things like, there's two types of cardiologists, those that are plant based and those who don't know the data.

And I don't think it could be more right to tell you the truth. It's, pretty Eye-Opening that how little I knew. And when I knew it, it just had it. It's sort of like, how do you live sort of in this inconsistent way?

And I'm sure you had the same experience I did in training where, you know, like I was in Philadelphia for cardiology. Right. So, the drug reps would bring cheesesteaks for lunch and we'd say, we're patient.

You just said bypass surgery. You should never eat a cheesesteak again. See you later, then. We'll all run any cheesesteaks. and so it's hard to consistent.

At least I found it hard to be. and then I've made these changes, which I thought was pretty amazing and mindblowing. And the more I learned, the more I was blown away and how little we all knew.

And so as a result, I and a couple colleagues brought in the American College of Cardiology that we needed to have a place for nutrition and lifestyle and created the first ever work group in the college, to tackle this.

And we have been prolific in our publications and projects ever since. but it's crazy to think that up until maybe 8 or 10 years ago, there was not a nutrition and lifestyle work group at the American College of Cardiology, which is the largest cardiology member organization.

But there is now and it's ongoing. It's very strong. And, it's been able to do some amazing things. but nonetheless, it makes me sad to think that, you know, this isn't a part of what we learn.

And so one of the projects we did in that work group was we actually surveyed a thousand cardiologists and published the results. And it turns out that not only are we terrible at eating fruits and vegetables ourselves, but 90% of us have limited to no knowledge in nutrition.

Yet we were asked every single day, doc, what should I eat? and it's mind blowing that you're giving advice without actually any training, knowledge or expertise.

So we've done a lot to try to move the needle on that. And we've created some online courses in person courses. And then, many of us who are active in the American College of Cardiology are also active in the American College of Lifestyle Medicine, where we've been able to move the needle significantly with education and other projects.

So so if, if I, if I, as a patient, were to go to my doctor and say, hey, you know, I appreciate your helping me manage my blood pressure, I'll take this medicine that you prescribe.

But I'm also interested in learning more about what lifestyle, what I could eat, what else I should do. And in this situation, perhaps where too often that's the case, my doctor might say, I'll be honest with you, I just don't have the the knowledge or the experience that I have in my world as a neurologist.

I've had, patients tell me that their doctors told them that food had nothing to do with their neurological disease, and they could just eat anything they wanted.

tragically, of course. Untrue, folks. Completely untrue. that food does have quite a bit to do with it. but, do you have a way, do you direct folks, or can you direct folks that may not be able to actually see you, as to what they can do to learn more?

Yeah. So first, I always recommend that people, check out the American College of Lifestyle Medicine and find a doctor that way. And there's a number of other websites.

There's plant based docs and a handful of others. you can usually Google it. And, there's an old joke in the plant based community, which is, how do you know if someone's vegan? They tell you, right.

So you can often find these people that way. but if you can't, there's a number of great resources available, including many food services, that you can get to your house, just Google, plant based food services.

You can find that. But, there's also recently, a website called Nourish New Research. nourish, like you would eat, that has virtual, nutritionists. And you can easily find plant based nutritionist.

In fact, some of my colleagues over the years actually do a lot of their work on that website. So I think those are helpful. But it really does take a village.

and it takes sometimes, a number of great people, health coaches, etc., to really get people to change the behavior. And it's not as simple as saying we want to be plant based, and you go to the grocery store and load up on, you know, Coca-Cola and potato chips and cookies, which are all plant based, but rather, you know, changing the very fiber of your being.

And so another great Kim Williams phrase is, you don't have to let your culture hold you hostage. And the other thing he says is, as we get older, we're all more likely to die, most of us from heart disease.

But I don't want it to be my fault. And that's an amazing way to think about things. Right? So we all have genetics that predisposes, which is what some of your doctor colleagues have told their patients.

Some of my colleagues have told their patients. But really vehement you put those genes in is what causes them expression, their expression. And we know from a number of very good studies, even people like there's been a couple of recent studies with adiposity that if you have genes that predispose you to making you fat, changing your diet can markedly diminish that risk, which is pretty amazing when you think about it.

Becoming Plant-Based and Building the ACC Workgroup

So at the end of the day, I always think people genes don't have to hold you hostage. And the efforts you you use to make these changes will only reward you down the road.

Now, the argument I typically get and you probably get as well as well. Doc, how about this guy who's 99? Yes, there are people who can smoke a carton of cigarets a day, that can drink out of a fryer and never seem to have a problem.

The problem is, is that you don't know you're that person until you get there. Right? So a lot of what we do, all these changes are hedges against some of our genetics.

And so bottom line is I think that there's an enormous amount of misinformation out there. It's much harder to get somebody to change their diet than it is to take a pill or proper procedure or whatever it could be.

And I think as a result, we also have a burnt out workforce in medicine, especially post-Covid. And so you're seeing all these very strange things. And it's funny, when I started this, if this was not the case, but now every professional society on the planet, the American Heart Association, American College of Cardiology, American Diabetes Association, American Logic Association, European Society, Cardiology, European Medical Society, all these different, they all endorse a low fat, wholefood plant based diet.

As a plant based diet is a number one way to prevent disease. And it's in all of the guidelines, right. So if you look up the high blood pressure guidelines, the first thing it says is diet and lifestyle modification.

Right. So a lot of us you know, we don't really pay any homage to this. We just kind of check the box and say, I told the patient to eat better, but we just gotta be more.

So, I hope that by listening to this, people will be inspired to say, you know what? I can do this most definitely. I will say that there is an increasing interest in health coaching.

In fact, a couple of years ago, CMS Medicare, developed some procedural codes for health coaches. Now, these were considered experimental codes. At the time, they were not reimbursed.

They actually are now, although I personally don't have a lot of experience in my practice with using those codes to see, you know, what we're actually getting reimbursed for.

We do have health coaching in our practice. we just don't use those codes. But at any rate, you know, health coaches can maybe spend the time with folks at some of the doctors struggle with doctors, are often faced with having to see a lot of patients may not have the knowledge we touched on.

may not have the interest and may not be specialists at really behavioral change and kind of meeting people where they are. So I certainly want to give sort of kudos to health coaches, particularly ones that are working with, you know, an a team based approach where maybe you have you're the captain of the ship, you're guiding the thought, the thought leadership, but you have those coaches that are helping you execute that plan with the patients.

Yeah, very much agree. It definitely takes a village. So you touched on chronic inflammation. You've used the word a few times. and I'm certainly familiar with that.

But I want to make sure that folks really understand what that is. It's the driver of most diseases. We think about. Yeah. So inflammation you know, it's kind of a weird thing when you think about it.

Sort of. What does that mean? Right? All of us know that if we, you know, get into, some sort of altercation or fall off a bike or whatever, and we get all cut up and bruised, that the area is very inflamed and some degree of inflammation is helpful for healing.

But chronic inflammation is where disease really gets sort of stuck. And, and people don't always realize that when you are in a high glucose environment, if you have diabetes, let's say, or if you are in what we call metabolic syndrome, where you have a number of, metabolic regulatory things that aren't going smoothly, your body responds with inflammation.

And when it responds with inflammation, it's angry, right? It's inflamed. And so that inflammation is the root cause for all disease. So, you know, people might be surprised to learn, like if you cut yourself, you get a little inflammation.

But if you keep cutting yourself repeatedly, that area can become chronically inflamed and even can end up developing cancer, which is a response sometimes to, chronic inflammation.

and so a lot of people are surprised to learn that, you know, inflammation and lifestyle are intimately entwined because when we lead an anti-inflammatory lifestyle by exercising and eating right and sleeping enough and connecting with others, the results are important.

And we can actually now measure inflammation by a number of different mechanisms. The one that many people are familiar with is C-reactive protein, which is a measure measure, sort of a nonspecific total body inflammation.

And when we see reactive protein in many people, we actually can lower with lifestyle that number. Now, from a heart perspective, it's a now a very hot topic.

So you may know this, but coronary artery disease is now back up on the rise. So for years the slopes were coming down and now it's coming back up. Oh there's this concept known as residual risk.

Right. So somebody comes in and they have a heart attack. We put them on a statin which also has anti-inflammatory properties. We changed their lifestyle that has anti-inflammatory properties.

And many of these people are still having cardiovascular events. And whatever else is going on is inflamed. So now we're even using funny drugs that were previously used for things like gout, like colchicine.

We use low dose colchicine as an example. Something called low doco is the brand 0.5mg instead of the usual 0.6 twice a day, and it actually has a 31% risk reduction of further cardiovascular events on top of statins.

So targeting inflammation through a variety of mechanisms. and it's interesting because, culture has been around forever. It comes from crocus flowers. You may know this.

so in theory, it's plant based, however you want to see it, but but eye opening and then many of the newer drugs that we're using to try to target, cardio metabolic renal conditions are also anti-inflammatory.

Now, you may or may not be familiar with that term, but it turns out that lots of things we thought were separate diseases may actually be all one disease on a spectrum, right?

So it used to be diabetes and metabolic syndrome and all this.

Finding Lifestyle Resources and Health Coaching

And it turns out cardio metabolic, renal disease, kidney disease on top of it are all connected. And so lots of the drugs that have come out for diabetes are actually not really just diabetes drugs.

So you're seeing cardiologists now use things like, two drugs like fa siga or Jardins. we're using GLP ones, which people associate with weight loss because they also target inflammation and cardiovascular risk.

So bottom line is, the more we learn about inflammation, the more it seems to be the common underlying cause for everything. And I think it's an important concept for folks to realize, that controlling inflammation will oftentimes help in healing, which is really great.

And it really as we, we recorded, I reported an interview with doctor de Perlmutter. I certainly encourage folks to check that one out. And he and I were talking about the paper, that came out fairly recently in New England Journal of Medicine, about the GLP one.

Agnes, that, it's it's not a semaglutide, but improve the motor symptoms of Parkinson's. And we're, we're finding that these drugs that really get at the core of inflammation and oxidative stress and, and, you know, dance glycated end products or, you know, modulate, insulin levels, in fact, have widespread effects, you know, throughout the body, improving arthritis, improving cardiovascular health, improving, of course, diabetes and neurological health to really points to that root cause.

I think it's not just the drug, but I think it's just pointing to the root causes of disease in general. Yeah, yeah, we so. with that, being said, it was interesting too.

You brought up the colchicine because, and then if you're aware that, it's a rather puzzling observation that higher, levels, uric acid, appear to have some protective effect against Parkinson's, and yet I certainly wouldn't want to be running around with high levels of uric acid, because by itself, it's, it's a marker of inflammation.

Yeah. I mean, we see lots of people, especially those with metabolic syndrome, that walk around with higher levels of uric acid, and some of them end up with gout and some don't.

And it's the exact mechanisms behind all this I don't think we fully understand. and so there are some conditions out there where, you know, when you eat better, you exercise, you live differently.

Things improve. but we don't always know exactly why. And that may be one of those that we haven't quite worked out the details just yet. It's certainly interesting. So.

So we're really we introduced this concept of chronic inflammation and say that drives a lot of these diseases. And then we segue into an anti-inflammatory diet and lifestyle, combating chronic inflammation.

and specifically how your dietary approach you're describing plays a critical role. I love the fact that you said, well, you know, like cookies and coke. Yes.

They may not be animal based foods, but they're certainly not anti-inflammatory. So to really dial in specifics, I'm just curious about, you know, I often take a dietary history.

what do you eat? Breakfast. If so, what does that look like? Do you eat lunch? Do you snack? Do you eat dinner? What does that look like, I wonder, I wonder, Doctor Friedman, if you could kind of walk me through sort of.

What is your ideal? What does it look like for you if you had the perfect diet, if your patients were eating the perfect diet, well, what would it look like?

Would they eat breakfast for they instead? Maybe practice, time restricted eating where? No. From your perspective, they should be eating breakfast. What a thing.

What does food look like very specifically to you? You know, there may not be one perfect answer to this, because I think that there's some emerging data, particularly with time restricted eating and particularly for people that are overweight.

but in general, there is some data to suggest that eating breakfast improves outcomes. the question that hasn't been quite answered is what time is that breakfast at?

because if time restricted eating is in play, it could be at 11:00 in the morning, or noon or whatever. So, but I think in general, it's really what the advice I give my patients is pretty simple.

I say, I want you to live like a peasant, which means I want you to eat simple, basic plant based foods. Move around a lot, and you'll feel like a king.

And they always look at me like, what does that mean? It means really no animal based foods, which is challenging for a lot of folks.

Chronic Inflammation and Anti-Inflammatory Therapies

So a good breakfast could be things like oatmeal made with water piled high with berries. And we know, of course, that berries have all sorts of very positive neurologic effects.

it could be lunch would be a salad with all sorts of greens and bright colored vegetables and balsamic vinegar. Is that dressing? maybe some, beans or potatoes or rice in the salad so you don't get hungry.

dinner could be half a baked potato with some beans and salsa, which is one of my favorites. And a big player. Broccoli or greens. That goes with it. But very simple basic foods.

And it's hard for people to grasp that because, you know, where I grew up, it was seven inches of pastrami and three inches a cream cheese and a pizza.

Pizza weighed 5 pounds. And when I was growing up, we all ate and drank like kings and queens and everyone was dropping dead or having colon cancer, breast cancer, heart disease.

We even know from ancient Egypt that when we've done Cat scans on ancient Egyptian mummies, which were the royalty, many of them in their 30s and 40s, they all had coronary disease because they were eating the cakes rather than eating the rings and whatever the peasants were eating.

So, in short, I think that's what I usually tell people now when it comes to time restricted eating or intermittent fasting, there's emerging data suggesting that there's a positive with it, which I think is great, for people that can do it.

but again, not everyone has to do that. And so everyone is going to be a little bit different. You know, I have some patients who say, well, doc, I love what you're saying, but I still I can't give up fish.

You know, the data on fishes is controversial, right? Many of the cardiovascular and cerebrovascular professional societies recommend some serving of fish.

But I guess what I would tell you is, if you look, fish are high in PCBs, dioxins, heavy metals are kind of phosphates, microplastics, nuclear fallout, a whole variety of things that are not to the brain or the heart or to the body at all.

even in the most wild caught fish you can find. And so for many of my patients, when they hear that, that's all they need it and they give it up. But for some people they can't.

And so then when I tell people is, if you have to eat that fish, I want you to make it the side dish. Right. So we all grew up where there was a giant piece of fish on your plate and a few carrots on the side.

I instead want you to have a giant plate of carrots and a bite of fish on the side. And some people can do that. So, you know, so again, everyone has to kind of you got to flex more or less where people are.

But more than anything, human beings are wired interestingly and that most of us can't do these kind of piecemeal things. Most of us have to be kind of drastic and say, okay, I'm going to do this now.

If you remember back in the day when the South Beach Diet came out, everybody was out, getting rid of carbs and they did it all or nothing. And the results were actually pretty good.

The reason is most people give up those garbage carbs, what I call garbage, and they lost on, so human beings in general can do better, I think, when they make these more drastic changes.

But there are some people who have to do it kind of slow, and I have every kind of person in between. One of the, sort of macronutrients I haven't heard you touched on is fat.

I come from a community that really, to an extent, embraces fat. Not necessarily. I personally don't endorse using lots of coconut oil. We've seen terrible, metabolic consequences, especially for ApoE4 carriers.

but nevertheless, fat is, there's an interesting sort of narrative about fat over the last, you know, 50 to 70 years where it was demonized. And then more recently embraced.

And maybe even the demonization of fat led to some of this diabetes epidemic that we eventually found ourselves in. So I'm just curious, from your perspective, how do you talk about that with your patients?

Yeah. So first, I usually tell people to avoid saturated fat. that's the one that seems to be more likely to clog arteries, so to speak. And those are usually animal based, although coconut oil is the big one.

In fact, coconut oil has more saturated fat than lard. you know, back in the day, before my time, when they were experimenting with atherosclerosis, they'd feed rats, you know, their body weight in coconut oil, and they'd have, you know, premature coronary disease and they'd be what they were studying.

So I don't recommend that. And in fact, the professional society guidelines specifically recommend against tropical oils for that reason. So palm oil and coconut oil, etc..

So what I usually call people is, lower fat diets. Now some of my colleagues in the plant based arena you may be familiar with, many of them will tell you almost zero or as low as possible.

And in certain conditions there is some data to suggest that some of the fats and oils, can cause endothelial, which is the kind of cell that lines blood vessels dysfunction.

So for my highest risk patients, I have them go as low fat as possible. But we also gotten into the habits in American culture in the last several decades where we put fat on everything because it certainly makes it taste

better.

And the truth is, you can have the most awful meal, but if it's covered in butter and salt, it's delicious, right? I can give you a paper that I've buttered and salted, and you need ten of, so figuring out how to do this in a way that makes sense is important.

So personally speaking, there are a handful of oils that are considered to be or have data to support their heart health olive, canola, sunflower, safflower.

And we know that nuts in small quantities are also quite beneficial in many cases. But for my highest risk patients, there's data suggesting that that may not be the case.

and so we have to balance it with what the patient's willing to do and what their risks are, you know, so, for instance, I always tell people the greatest thing that, or the worst thing I should say, even though I see it as the greatest thing that ever got invented, was shelled pistachios. Right.

So when you remove the shell, it's easy to eat giant handfuls of whatever your favorite nuts. And the truth is, those shells really slow you down, and by nature's design, are hard to get through.

There are tough nut to crack, so to speak. and so figuring out how not to overdo it is important. Right? So, you know, some of my colleagues, even Esselstyn, many of you may know if you press him hard enough, he'll tell you you can have three walnut abs in a day.

Plant-Based Diet Details, Fats, and Nutrients

And there's some data to suggest that walnuts are healthy, even a Brazil nut a week and lower cholesterol, as an example. you know, so there's been lots of studies over the years that have shown benefits, but it is very easy to overdo it.

And you can sort of nullify everything. and it sure is tasty. But then it also becomes highly caloric and that's the other. So I think some of the demonization of fats came from the fact that they're the highest sort of density calorie that you can get.

And so, you know, calories are calories and yes, different ways are calories are metabolized, mean different things. But by and large, if you're eating large quantities of fats, you know, they can be a relatively small physically, lots of calories.

so for my patients, I usually recommend a lower fat wholefood plant based diet. And for some patients I recommend a very low fat, and then, you know, the fact that come naturally as part of a peanut or a nut or a legume or a, you know, avocado.

Great. There are some people out there who are eating, you know, 15, 20 avocados a week. That's probably too many. Also, you know, so I usually tell people to use things in moderation.

and I think that there are healthy fats. but I think that when we extract them is when we have problems. And so, you know, one of the big controversies is about oil, with the exception of, say, olive oil, right, to get oil out of a canola seed, which these little teeny tiny, you know, lots of pressure and eat and all that.

And so, you know, when your body sees sort of, purified oil without the matrix of the plant that it comes in, sometimes it can do things that we wouldn't want it to do, like make triglycerides or create free radicals.

and so, you know, it all has to be balanced. And the best way to get fats, in my opinion, is to get it in the matrix of the fruit or vegetable or grain that you're consuming.

So basically, a very political answer to say some is probably good. Be careful. It's easy to overindulge. Yes. And

you're promoting a plant based diet.

So just want to, kind of offer, we'll just ask some basic questions because as you probably know, there's certain nutrients that tend to be more dense or almost exclusively present in animal based foods.

Vitamin B12, would be one example. the challenges of getting enough choline, coenzyme Q, which cardiologists love to talk about. So how do you sort of mitigate the potential risks of, nutrient depletion, specific nutrients?

Of course not. Not nutrients overall, with this particular approach. Yeah. So for, you know, first, the B12 issue, I think is a little controversial in that I suspect that before our plants and fruits and vegetables were super cleaned and disinfected and whatever there'd be yeast on all sorts of things and lots of yeast, B12, naturally, I probably would consume enough to get plenty of B12.

So yes, for my patients that are very strict this way, you should recommend they take a B 12 supplements just to be sure. but there are people who eat nutritional yeast, and brewer's yeast and a few others, that are doing just fine without any supplements.

the CoQ10 data is a hit or miss. In fact, they removed it from the guidelines and that it's not considered a class 1 or 2 indication. sort of a either no effect or harm, is that's current classification.

and I would say that your body makes plenty of coenzyme Q10, commonly known as you pick one or you pick one known. And the reason is it's ubiquitous. and so statins sometimes deplete that in some of my patients.

Do go on, you know, the active form and feel better. And that's certainly reasonable in some cases. in terms of choline and other things like that. As you may know, co-lead is a little controversial because choline ingestion can lead especially if you are not a plant based eater.

Your gut flora can convert choline and carnitine and a handful of other things into precursors to tmao O trans methylamine oxide, which is associated with a whole variety of neurologic and cardiovascular and cerebrovascular outcomes that are less than ideal.

So in general, you know, for instance, choline is very high and say eggs and consumption is super high and cholesterol, but also very high in its risk for developing diabetes and people who consume them regularly.

So in general, I usually tell people that if you eat plenty of fruits and vegetables and starches, to some degree, and again, if you're trying to lose weight, you don't eat a lot of starches.

But some, you know, for instance, a very wonderful way of getting starch in is through a legume, which is a perfect matrix of protein and starch, all in one convenient form.

you should, in theory, be okay with the colon limitation. Now, there is a company out here in Colorado that makes a vitamin specifically for plant based eaters called, Terra seed, that contains the B12 and some of the precursors for EPA and DHA and vitamin D and all these other things that we've mentioned.

that often is a great fit for people who are sort of transitioning and worried that they might become deficient. But I think if you are a well planned plant based eater, you don't have to worry too much about deficiency in many things.

but if you are worried about it, and B12 would be the biggest one I would worry about. certainly easy to get a supplement. So. Very good, very good. One of the things that we look at very often in our clinic, in terms of you mentioned C-reactive protein as an example.

We like to look at the ratio of omega three and omega six fatty acids, with omega three being more anti-inflammatory, primarily for the omega six, particularly arachidonic acid being pro-inflammatory.

And I found that not only does it give a nice sort of natural give to understanding how food can lead into

inflammation, but it gives very actionable steps in terms of boosting your intake of omega three fatty acids.

And just curious how you how you frame that out. So you're saying, let me just make sure I'm understanding you. Right. So you're worried about the fatty acid potential for deficiency?

If I'm hearing you correctly? Well, what we find in general, and I'm certainly not the person who made this up or discovered this or, you know, is that if we look at what is often called the standard American diet, it, it tends to be very high in pro-inflammatory omega six fatty acids, particularly arachidonic acid.

Right. And that often comes through some of the, mass produced animal based foods, you know, poultry, cattle that are, you know, grain finished. So they have that marbling, etc., and, you know, I realized to tell you about, well, you know, that there's there's reasons to potentially not eat fish, but in general, I would say fish, as a staple of the American diet, is not nearly as popular as fit as chicken or beef to begin with.

And then what fish might be eaten is probably more likely to be, you know, fried fish, fried catfish than, you know, wild caught salmon. so when we look at the ratio of omega six to mega three fatty acids and we compare that, say, to our hunter gatherer, diet, which you sort of alluded to in the sense of, you know, we would have eaten food that had, you know, some yeast or mold or whatever.

We weren't so hygienic with our food. that the ratio of omega six to omega three is very high, very, very high compared to our, ancestors. And that if we adopt a diet that allows us to reduce those omega sixes doesn't mean eliminate them, but reduce them while raising omega three fatty acids.

then we are and we are doing. That's one more step that does help to sort of adopt that anti-inflammatory diet. Yeah. And actually there's a lot of data actually on and just as you mentioned, on how, cattle in particular are fed and their ratios of things, and the truth is, it's very hard to find meat that's truly grass fed from birth, which has an effect on those ratios.

but what I would say is, bottom line is why not get some of these, DHA EPA omegas from things like ground flaxseed or walnuts? And yes, we may have to eat many more in order for our body to more efficiently convert them.

we can even eat algae, believe it or not, and get a lot of this.

Omega Ratios, Environment, and Closing Remarks

and so what I always tell people is, you know, the other thing that most of us are starting to just realize in most of medicine is just starting to realize is the environmental effect of our dietary choices is incredible.

And with our predicted environmental rise and temperature, and pollution in our oceans, and, you know, if you ever thought about it this way. But if we were to all eat fish, the way our professional societies recommend, there wouldn't be a fish left in the ocean in just a few weeks.

which is kind of crazy when you think about it. Right. So, and, you know, there's been all these great, studies released in the New England Journal of Medicine in The Lancet in Europe and a handful of others, all about the environmental effects and where we're headed, and how we're going to have environmental related deaths as a result of heat, as an example.

And a lot of that heat is generated by greenhouse gases, which is generated by beef production. So bottom line is, the more and more we learn about all these different things, you know, the Omegas and the mega ratios and all that are certainly interesting and intriguing. I'm not sure that the whole story.

And so at the end of the day, why even bother eating things that are a bad for the environment and bad for you, whether it's mediated through these omega ratios, or not?

And so I always try to push people to look bigger and larger, but I want my children to inherit fish in the oceans. I want my children to inherit blue skies.

I want my children to inherit animals on the planet without, all the bad things that happen to them, you know? And there's even a version getting me. I've seen some of these papers recently that the stress that the animal endures as it's being slaughtered may release some of these cortisol type hormones into the meat, which may have an effect on us.

It's kind of mind blowing. you know, someone was telling me a story the other day that a patient who went vegan used to be at a really intense road rage, and then we went vegan.

He became this went away, which I was like, that's amazing. Maybe that's what's driving all this craziness. but anyway, interesting stuff. So the more the more and more you learn.

Is that one micronutrient macronutrient and people get real crazy about, having this supplement in this ratio. They said nobody was ever designed to live that way.

So figuring out a way that you can live that's harmonious with nature, harmonious with your your family and good for health and planet sounds simple to me.

That is wonderful. That sounds like a wonderful note to wrap up our chat for today. And there's so many other areas I would hope to get into. I certainly want people to be thinking, as you've alluded to, about eating mindfully, about not necessarily, you know, stopping when your belly is just stuffed with food.

there's a wonderful, information coming from Dan Buettner. His where and the blue zones where they talk about the tradition of, you know, pausing and essentially eating sort of 80% and then take a little time to let those hormones catch up and you'll feel satiated.

And then even from the work of Roy Walford is now deceased. But understanding that we want to, focus on a nutrient dense diet, and we probably don't need nearly the amount of calories that most people typically take in.

And in fact, longevity has been directly associated with calorie restriction but optimal nutrition. So eating just a little bit less than that standard at 1800 to 2000 plus calories per day.

but Doctor Andrew Freeman, thank you so much for joining us on the Parkinson's Solution Summit. If people do want to find out more about your work, what you do potentially even visit with you as a patient, can you share with us a little bit about how they can do so?

sure. So people can certainly find me in Colorado at a place called National Jewish Health, which is where I work. And you can certainly make an appointment.

And we certainly have a whole out of state program that we cater to. you can find me on Twitter @heartcuredoc you can also find me on my website, which I don't update nearly as much as I should.

Called vegancardiologist.com and then, I also give talks regularly at a variety of conferences around the country. so if you're going to a nutrition, conference, you may see me.

And if you don't see me, request the organizer to add me. Wonderful, wonderful. Dr. Freeman again. Thank you. From the bottom. My heart literally, for participating in the summit.

And we look forward to reconnecting as soon in the future. Definitely. It's such a pleasure to talk with, like minded individuals. So thank you.