Introduction to Dr. Michael Caufield

welcome to another interview with the, Ms.. And Autoimmune Summit. Now, my next guest is Doctor Michael Corfield. And PhD is a board certified naturopath.

He also has a PhD. Now he's devoted his career to practicing and promoting natural health. He's a high demand speaker, author, and educator in his field.

Doctor Cofield provides personalized naturopathic health care at his busy multidisciplinary integrative medical center, the Curve Health Center, in Boise, Idaho.

He treats the root causes of disease and strengthens the body's ability to heal. He's practiced medicine for over 30 years, is one of the leading experts in treating cancer.

He works to increase awareness about the natural ways to treat cancer. He understands, how to support our natural immune function. He was the host of the TV show, the Doctor Michael Show and Tru Health, body, mind, spirit.

And the radio show Health Made Radio, where he connected with international leaders in the integrative health arena. He's also the host of an internationally recognized podcast, Integrative Cancer Solutions, with Doctor Caufield.

Now, welcome. I know he has a lot of cancer expertise. He has a tremendous amount of expertise in integrative medicine to support health and vitality.

Welcome, doctor Caufield. Well, I'm just so glad to have this conversation with you, Doctor Caufield. And I thought we could start with mitochondrial health.

And why mitochondria are so vital for anybody with Ms. or a systemic autoimmune problem.

Why Mitochondria Matter in MS and Autoimmunity

Well, a lot of what a lot of people don't really understand to understand and realize that, you know, your brain, your neurons, I mean, they if actually when you're just sitting still, your brain requires about 30% of all your energy consumption.

So nerves and brain, you know, have a huge amount of mitochondria. And what we're seeing is that, yes, we we know that. Ms.. It's a demyelination. It's an autoimmune condition.

You know, you have immune systems that start to kind of infiltrate, and start to kind of degenerate. The, the myelin sheath. But a lot of that is actually taking place due to mitochondrial dysfunction and lack of energy production.

And that is actually both. Yeah. Within the neural cells, within the brain cells and within actually the white blood cells, you know, the white blood cells, they they need energy.

They need to be able to kind of have, all the ATP or the energy production that they need in order to be able to fight off the infections. And when they're tired, you know, they get confused and they start to attack things that they shouldn't.

You know, they may not make the wisest decisions. And, and that's, that's kind of that. So that's why it's so huge to in addition to looking at, you know, the, the autoimmune aspects of pressing immune system and there which is,

you know, yes, that's good to do.

But but you want to find out why is that taking place. You know, why is the immune system functioning in the way that it shouldn't. And that leads back to it is an energy deficit, you know, within the nerves, within the brain and also within the with the immune system.

Okay. So, my you are important, really important to the brain. And probably also the spinal cord, the peripheral nerves, all of the nerves. What makes the mitochondria struggle so.

Well, so it is. So we we're used to if we look at the cell, you know, we see the cell and it has a cell wall membrane. And that kind of protects it from what's going in and out.

And it is the same with the mitochondria. It also has the cell wall membrane. And but it's not as solid and strong and protective as the membrane around, you know, the the cell.

So that that mitochondrial wall very easily gets impacted by inflammatory things. Yeah. It could be infections, could be heavy metals, could be chemicals.

They they've seen. Excuse me. They seen like things like Epstein-Barr heavy metals, you know, are big factors. But that's not that's not the only thing.

You know, the other viruses, the pathogens that can really impact the mitochondrial function. So we got to find them the the root cause, you know, what is causing that, that impact on the mitochondria.

But we also want to understand, you know, what is happening within the mitochondria that is is creating that dysfunction. We're seeing, you know, people with Ms.

say see we see so the mitochondria is kind of like you have train station. You have these electrons that move through from one stop to the other. And as it's moving, it's producing energy.

Mitochondrial Damage, Infections, and Oxidative Stress

And within the mitochondria of people with that Ms.. They see that there's a dysfunction in the movement of the electrons there. And because of that dysfunction and actually then leads to production of what's called reactive oxygen species or oxidative things, you know, things that, I mean, we know oxidative things from like metals, you know, iron rusting, you know, that's an oxidative stress, you know, on that metal.

And it's the same thing that happens. And within, you know, the mitochondria. So when you have that dysfunctional mitochondria, it leads to production of these different kind of reactive oxygen species that puts more stress on the mitochondria, which actually creates a, a vicious cycle in a way.

And then we also have, in, you know, people battling Ms.. We see that the, the production or the creation of mitochondria is is not functioning as, as well.

So they actually then have less of these energy factories, you know, the mitochondria than normal, normal cells. As we know again, nerve cells require a huge amount of mitochondria.

So if there's a deficit, if they don't have enough, then, you know, they can't perform their function. They can. You know, clean out debris, toxic debris.

They can fight off infection inside. So it's a lot of work they can't do. And because of that and trash accumulates and creates more inflammation and then promotes actually more of the kind of death of that cell just because the mitochondria is not functioning the way that it should.

So the mitochondria are not working as well. And then over time, there are fewer mitochondria, and all of that

stress then, probably adds to why there are more relapses, more, new lesions, more accumulation of disability.

But would that be an accurate description? Yes, that that's a very good description. And that's that. So then we got to look at, you know, what are some kind of angles that we can go after.

So we know that there's a mitochondrial deficiency in Ms.. And we know that there are factors that can contribute to that. And you know both we have genetics.

So we want to obviously look at genetically, you know, what are some weaknesses that exist. And they're great. Labs that you can run for that then support those what's called genetic snips, you know, with specific nutrients and a certain.

Hang on, doctor Caufield, can you explain, what a snip is and that your listeners will know? Yeah. So it it yeah, it is a bit kind of a short version.

There's a single new type, you know, nuke type, a protein, you know, so it it has to do with. So when we get genes from our father and from mother, and if they are perfectly fine, then, you know, everything functions the way that it should. So.

But let's say one of those genes, you know, maybe from your mother, maybe from your father, or maybe even from both, then if they are not as, as functional or they're, they're it's kind of like a little handicap, you know, genetic.

Yeah. That that they, we get them from our parents and because of that then cellular functions or different things that happens within the cell are not going to be able to function the way that it needs to because we we don't have the, the genes that are appropriate to be able to fulfill that function to its fullest.

You know, common one is like a lot of people know me for, which relates into how we, detoxify and also relates a lot to the production of different, you know, neurotransmitters.

And, you know, so if we are then deficient in that, we're not going to be able to move toxins out as well as we we we should.

Genetic SNPs and Root Causes

And then by identifying them that genetic snips so that genetic dysfunction know that we have, then we can then see what are some of the nutrients that can then support that function to optimize.

We know it's dysfunctional, but if we support it with nutrition, then we can then optimize that genetic function. And so obviously if we deal with an autoimmune condition, then there is a big likelihood that there are some genetic dysfunctions that drove that process.

In addition to things that you may have been exposed to. Okay. So the wildtype genes work. Well, the mutation that has a slight alteration of the gene, single nucleotide polymorphisms.

Snip. You can test for that. And then that gives you some clues as to a higher dose of the particular nutrients may overcome that. Snip. So again, super helpful to be aware of that.

So what we've heard about, genetic variants, the snips we've heard about, heavy metals, we have heard about, probably poor nutrition, is part of this, infections.

You've mentioned Epstein-Barr. I'm thinking the coronavirus, which we're all much too painfully aware of. That led to some persisting symptoms for some folks and became a much more, troublesome disease.

For some individuals, are those sort of the big categories as we think about, things that impact how well my mitochondria can work. Yeah. So so those are great and kind of going back to coronavirus.

And obviously that's something that that hit the world, you know, and and a very, you know, a huge yeah a huge level. And so we we see with the coronavirus and that really I mean it impacts the mitochondria directly.

You know the the coronavirus you know, so if you have these kind of long Covid symptoms, a lot of times it is due to that downregulation of the mitochondria.

And so so that becomes even more important, you know, when you deal with them with Ms.. And then also we see that it also creates inflammation along the endothelial lining.

So they have then that kind of transport of nutrients to the cells in order to build them fuel the mitochondria is an impact that as well.

Testing Mitochondrial Function

So and I see a lot of them hidden infections, like Epstein-Barr or Lyme or mold, you know, that we've you were able to battle with a certain level of kind of immune system function, but then you add the coronavirus on top of it, then all of a sudden it just becomes too much.

And a lot of these autoimmune like Ms., you know, attentive to tend to flare up. So like, and this is again, for the listeners, if you've had coronavirus, you you're at a bigger risk to have a, severe pseudo relapse.

So worsening of your Ms. symptoms, they may take longer than usual for you to get back to your usual level of function. And I think Doctor Caufield basically just told us that mitochondrial dysfunction is part of why it's taking longer. So all of this is happening, I think our listeners are beginning to wonder, like, okay, so I wonder how my mitochondria are doing.

Is there a way for them to, you know, pull into a dealership and, you know, get their mitochondria checked and tuned up? So the, the are different techniques where you can assess mitochondrial activity.

I mean, we, we do a number of things here. Yeah. You have, you know, just actual plant heart rate variability, you know, because that's so directly connected to the autoimmune then and how you're then able to turn on mitochondria.

So there there are different machines that utilizes heart rate variability to kind of see how your mitochondria is functioning. There are also biopsies you can do.

Yeah. Which is a little bit more intrusive. You have other things like, you know, a piano is a is a common sap, system out there. And there are other systems that then measures, you know, how your, your energy production level.

And so, it's it's really fascinating. You also have labs where you can check in or cellular nad NAD assay is a component within your mitochondria, within your energy, producing, you know, system.

That is crucial for to make sure that that's running smoothly and then turn that on so that there are a number of ways that you that you can check that, you know, which, which can be really helpful to understand.

And, you probably would not be able to get that to your usual conventional neurologist or primary care. They're probably going to have to go to someone who has been trained in integrative functional medicine to access these kinds of tests, correct?

Yes, yes. So it is. And that's it's important to understand that you have your your general general practitioner, or neurologist, and they function within a certain box and they have certain tools that they, that they utilize.

And so they, they're great and what they do, but recognize that they do not have the knowledge of everything that's available. And their training usually does not include a lot of the kind of functional thinking, you know.

So there are a lot of functional doctors, naturopathic doctors, you know, like myself out there that are then using different tools to assess these things, but to not expect that out of your your normal neurologist or normal GP.

Finding Integrative Care and Advanced Therapies

Because that's just not part of what they do. It's not what they're trained in. So how would they find someone who might be able to do this kind of assessment?

So I would actually look ins and see, you know, what, what systems that are available, you know, a common one like I mentioned, said piano that's a common one.

So you can look and see, you know, who out there, you know, just do a search and locally and see if you can find somebody that that does that. Obviously you can travel to, you know, people like myself, you know, I have patients flying in from a little bit all over the place, where we then kind of really support the mitochondria, go after the root causes.

And we use a lot of, you know, stronger therapies, you know, stronger IVs and, and other, you know, Ibbotson Hyperbaric and Hockett and laser therapies and, you know, methylene blue and poly MVA.

There's a lot of different things that you can bring in. But it is good to see, you know, who's available close by. That would have knowledge. And then I would just call them and say that these are, this is what I want to achieve.

Is this something that you do or or who would you recommend. So for our listeners, are there some really basic lifestyle interventions that they could do to better support their mitochondria.

And that's the thing that there's so much that can be done, that are on a foundational level. And you can just do that at home, you know, through your, your lifestyle.

And yes, there are a lot of heroic treatment. There are a lot of great supplements out there, that can be really beneficial as an, as an add on. But if you don't do the the foundational component, then it's kind of like trying to fill a, a leaky, you know.

Yeah. Trying to fill a leaky bucket, you know, so to say it's always going to start to kind of leak out, you know, if you don't do the foundational things and the foundational they they include, you know, what am I eating?

And that's, you know, like, like your protocol that you that Terrible's protocols is phenomenal for that kind of recognize eating the type of food that will control the inflammation.

Lifestyle Foundations for Mitochondrial Support

You know, a lot of, you know, filled with, nutritive antioxidants that help to kind of calm down that that, you know, talked about the production of reactive oxygen species or oxidative stress, you know, to eat food that that help to kind of calm down that inflammation.

Yeah. And that's, you know, things that are loaded with antioxidants. And obviously these are things like different berries on different fruits and vegetables.

You know, that can be really, really helpful. You know, different spices. You know, really helpful in that process. And then you can also do, different things to, you know, the different supplements that help them to, support mitochondrial, you know, production like EGCg is, is a is actually a great one to help with the, with that production.

And then oxygen in itself, just making sure that you, you breathe, you know, you learn how to breathe, take deep breath. You know, breathing meditation.

Be out in nature, be around lots of plants where a lot of oxygen is produced. You know, that helps then with your

mitochondrial function and mitochondrial activity.

And then, you know, things like, you know, just regular stress relieving, techniques, because we know that stress in itself, really promotes inflammation.

And also suppresses mitochondrial activity. Suppress. Yeah. Your, your inner mitochondrial function and also the mitochondrial restoration. So it's hugely important to get into that parasympathetic relaxed state where the body can heal, repair, regenerate, detoxify.

So that becomes a really, really important aspect. And exercise, you know, movement. You know, movement stimulates mitochondrial activity as well. And and not to forget sleep.

Yeah. Sleep is is where the body then helps to detoxify and especially out of the brain. So we, we see when we're sleeping, you know, the brain actually squeezes itself, you know, to get rid of a lot of that toxic, you know, lymph, toxic fluid that's in there and kind of flush it out while you're sleeping.

So that's why that deep sleep is so important. Because if we retain all those those toxins and that debris, you might, you know, course, when we, we burn energy we produce is kind of like a car that produces exhaust.

Yeah. So when we burn energy in the mitochondria, we produce exhaust. And we need to flush that out, especially in the brain and the nervous system. And when we're sleeping, that's when that takes place.

You know, we are essentially squeezing all those toxins out. So that's why sleep is so important. In addition to, you know, diet, you know, stress control, movement, exercise and, and movement, you always soup.

You gotta figure out what type of movement can I do, you know, of course, if you're in pain, then obviously there's some limitations, you know, so things like gentle you can, you know, a little qigong, a little yoga, you gentle yoga, stretching Tai chi, water aerobics.

You know, that can be really good because it's gentle on, on your joints. So there are a lot of options out there. But just to move in some fashion is is so great for the mitochondria as well.

Times for sitting, so bad. So even if all you do is put a little timer on your phone that reminds you to get up and take a few steps every hour is a great first step.

So you don't have to make a a huge trip to the gym. You could just walk out to the, to your kitchen, or your bathroom for a drink of water and a few deep breaths along the way.

That could be, super, super helpful now. And that's and that's that's the thing. I mean, like, in your situation, you know, when, when you are wheelchair bound and then you've, you just gotta figure out what can I do?

Yeah. What kind of movements can I do? And and it's you gotta and I, like you mentioned, even if it may look like the smallest thing, all the smallest thing, you know, add up to a lot, you know?

So whatever little thing you can do, will promote and drive you closer to doing better. Yeah. Particularly if you can do that little thing, every hour.

So you have, less of this continuous, sitting, that can be, super, super helpful. Now, can you give, our listeners 1 or 2 supplements that would be helpful for the mitochondria?

Yes. Yeah. So I mentioned NAD yeah, I like NAD and they're different supplements. There's some that are better than others. That help to promote the, the nad, you know within the body.

Yeah. Niacinamide Eminem combination of.

Supplements and How to Contact the Clinic

Yeah. Also helps you out with, you know supporting the nad production within the cell. You have things like l-carnitine. Yeah. Is great to support energy production, especially from fatty substances.

You have alpha lipoic acid or one that I use a lot that is, say, kind of a, a version of alpha lipoic acid that is fantastic to drive mitochondrial activity.

Poly MVA. Yeah, I use that a lot on both oral and as intravenously. But alpha lipoic acid is a little bit easier to get. You have, ribose. Yeah. It's a type of a sugar, that does not, have the same kind of impact, like glucose, where.

Yeah, it triggers inflammation or, can trigger that kind of in, you know, where you have spikes in glucose, you know, spiking sugar and then deps, you know, to, to trigger, a lot of stress on the body.

So ribose is fantastic. For energy. And then you have the different B vitamins like vitamin B1 is huge vitamin B2. So doing a good quality and I would do a methylated form of a b-complex can be really, really helpful.

So just incorporated those can can take you far. Okay. Well, Doctor Hirschfeld, this has been, really superb. Can you tell our listeners how they find you?

So I'm located 100 here in Boise, Idaho. Yeah. It's, it's out and out of nowhere, but it is the place where everybody's going to, So, you can find me on my website, the Carl Feld center.com, and there's huge amount of information, fact.

If you type in, Terry Wall's name, you'll see in the interview that I did with her on the radio show a long time ago. So you'll find a lot of information, a lot of blogs, you know, a lot of interviews that I've done.

And then obviously, if it's if you feel that you need more help and want to kind of hit things a little bit harder, we have a lot of tools there, you know, in fact, we had, a lady just flying in that was dealing with a huge amount.

She wasn't dealing with Ms., but a lot of brain disorders. And within two days, you know, there's just a huge difference in how, you know, she's able to communicate and, interact and remember things.

And then she, she is an actress, you know, so she needs to remember all her lines. And and if her brain is not functioning, she is, you know, she can't work.

So, so, yeah, you can just look us up on a website or give us a call, and we'd be happy to assist. Great. Thank you. Doctor, heartfelt thanks for the pleasure.