Cancer, Metabolism, and Weight

We have a wonderful guest for this DrTalks. I have Dr. Michael Karlfeldt, who is a Naturopathic doctor and PhD, and we are going to be talking today between the relationship of cancer and metabolic health and weight, what that relationship is, what we can do about it.

Thank you so much for joining me. It's going to be so fun. Thank you so much. Dr. Francavilla. So let's start off with sort of the foundation here of what is that relationship between cancer, metabolic disorders and and weight.

Well, so we looked upon cancer and all the research has been, kind of done mostly in genetic, what are some of the genetic dysfunctions? What are some of the genetic targets that we need to address in order to be able to, to reverse cancer or maybe protect ourselves from cancer?

And the more and more we going down that, that rabbit hole and sort of say we're recognizing there's really no one genetic disorder, there's no correlation.

You know, these genes will have this pancreatic cancer, these genes will be that breast cancer and so forth. So now we're starting to kind of shift towards information that's been around since the 30s.

You know, Otto Warburg, you know, he got the Nobel Prize in regards to, you know, how a how the cancer cell is metabolically different than a normal cell.

And so now we are then starting to look then at more the metabolic activity within the cell and how that differs. And what can we do to optimize the, the metabolism.

And then we are starting to look down at a little kind of organelle called the mitochondria that exist within the cell. And the mitochondria. It's a fancy name just for that little component that produces energy.

Mitochondria and Cancer Cell Energy

And we know that, you know, if we are gaining weight, if we are sluggish, if we're tired, you know, then we are not producing, you know, those little organelles.

So not functioning very well. The mitochondria is not functioning well. So there's a strong correlation between cancer and obesity or overweight or fatigue.

And where we're looking down at the mitochondria being that component. And what can we do then to optimize the mitochondria to optimize energy production?

You know, in order to be able to support tissue repair, muscle building, losing all of the fat so we don't store all that excessive weight. And then also having help this cellular function that are not turning into cancer cells, I think.

You know, it's really important to emphasize, one of the first things you said here is that we've been trying to look for all these genetic causes of cancer.

And with few exceptions, we know that there's some specific genes and risk factors. The vast majority of cancer that people are getting is not genetic.

Right? And like we all need to be taking care of our risk factors here. I see that a lot of times with my patients, maybe you see the same thing where they come in and they tell me, oh, but I don't have a family history of cancer.

It's like, well, that's good. Then we might be even more worried. But honestly, like all of us need to be protecting our metabolic health in order to prevent, multiple different types of cancer.

Yeah. And it's it's fascinating. Exactly. That I can't I can't tell you how many cancer patients that come to me, and there are no genetic, risk factors whatsoever.

And they've they kind of checked and they there's no of genes. There's none of that gene. So none of that. So we're seeing more kind of the lifestyle as being that 95 plus percent reason for why people are getting cancer.

And then to really understand the underlying factor, which is, you know, why this summit is so important that you're doing is looking at it from a metabolic point of view and not addressing it.

You know, at the point only when you are dealing with cancer, but addressing it down, you know, much, much earlier and kind of looking and see where my body at, you know, at do I have, am I sluggish, you know, am I not able to think appropriately and am I depressed?

I'm an anxious am I? You know, so all these different things are symptoms of lack of energy in the body that then triggers inflammatory processes that can then lead then to, different degenerative diseases and cancer, obviously being kind of the, the furthest down the line that that puts you at risk for, for ultimately death.

So you've talked about, energy and mitochondria a little bit a couple times now. Can you explain a little bit more what that means, and what are some of the things people can do to optimize that mitochondrial health?

Yeah. So, let me go and kind of explain kind of in a cancer cell first, you know how they differ. And then let's go into kind of what we can do. You know, what are the challenges with the mitochondria and what we can do for it.

So any cancer cell, you know, when we have the mitochondria that is dysfunctional in order for that cell then to be able to still continue living, you know, it's recognizing I'm not getting enough energy.

So now I need to operate in a different way. So now instead of of using the mitochondria to use oxygen to, to burn fuel, which is a very efficient way to produce energy, it starts to then ferment sugars.

So it bypasses the mitochondria and then starts to ferment the sugar and produce the energy that way.

Environmental Toxins and Detox Support

It's a very inefficient way of producing energy. And that also produces and chemicals as byproducts are very inflammatory, very acidic, you know, creates an environment that's really, prone or supportive for more kind of cancer to, to, you know, to, come about.

So the key then is, is that in order to be able to prevent that process from taking place, we want to be able to support a healthy metabolic activity and what they've seen also is in the mitochondria a controls the apoptosis switch.

You know, the the cell death switch. We you know, when when we have when we have cells, they're tired. They're ready to retire. They've done their job.

You know, they they kind of leaving their company. And I'm going to go and and just sit by the beach and relax for the rest of my life. Yeah. When we have those kind of cells that's ready to they've done their job.

We we're supposed to flip the switch and break them down and give and give space for new help. The cells to come about. And so mitochondria controls that.

And so if we don't have that switch then they're more likely, you know, to start to live forever, which is kind of what we're looking at. Cancer cells that never die.

So, you know, the key is, to support that mitochondria. And the way we do that is first, we want to make sure that what kind of environment does it live in?

You know what what kind of and what is that exposed. So and then we got to look at what is my chemical exposures. What is my heavy metal exposures. You know, what are some of the pathogens that we may be dealing with.

You know, what am I what am I cleaning my counters with? What am I brushing my teeth with? What am I putting? I might, you know, my skin, you know? So all these factors are then absorbed and absorbed into the bloodstream, and then that gets in into the cells and then interfere then with how the mitochondria functions.

And it's kind of like pouring then dirt into your gas and into your gasoline tank, you know, for your car and expecting your car to run. Ultimately, you know, an optimally.

And so what we want to do is that we want to kind of make sure that we have clean gasoline for our car, and especially if we want to function, we want to be young and vital and be able to have a high metabolic rate.

We we want to have as as high octane gas as possible with little dirt as possible. So the first step is to clean up your environment, clean up what you're ingesting now, clean up what you're putting on your skin.

You know, to support that mitochondrial activity. That's a first step. Yeah. And you know I it's interesting as I'm talking with experts in all sorts of different areas, how a lot of things come back to that component of the environment.

We've really blamed very specific parts of our environment for a while. I think we all know smoking is bad for us. More and more of us are becoming aware that, maybe like ultra processed food is is not, something that's good for us, but I think we're missing a lot of this other environmental factors that are having a huge impact on our health.

And some of them are so ubiquitous, meaning they're so everywhere that they're kind of hard to target and identify. So you mentioned sort of like cleaning supplies and cosmetics, right.

Like we think, oh, we're putting it on our skin like no big deal. Right? Well, the things we put on our skin get into our body. Right. We have actually multiple medications that we give to people that way is patches.

Like we know that things put on the skin get into the body. Right. And so, I think that this is like an eye opening thing in my world in obesity medicine.

We're starting to call them obesity genes. Right. So things that cause obesity. But you know, they're really causing most of these metabolic conditions, whether it's cancers or Alzheimer's or diabetes, like it's all these things in our environment that are disrupting our cellular function.

Yeah. And that's the thing is that, you know, we're talking about the mitochondria, but we're also then can bleed into, you know, the the endocrine system, endocrine, you know, disruptors.

And, you know, obviously when we're focusing on on weight loss and the reason we're doing that, we want to look at healthy metabolic weight loss. And in order to be able to do that we need to have then a healthy endocrine system.

We need to have healthy cellular function. And so we can think of, you know, people, well, I should, you know, fast or I should eat less of this or eat less of, you know, less carbs and more protein and, and go on all these different diets.

But if, if we don't also look at, you know, these factors that we're talking about and how they then impact, you know, the, the cellular function, then we are shooting ourselves in the foot because a lot of times also, we have, our fatty tissue is kind of like a, a storage unit, a safe storage unit for a lot of the toxic chemicals that we're exposed to.

Because the body doesn't want all these, you know, chemicals and heavy metals to continually be floating around in the bloodstream and irritating the kidneys and the liver and the lungs, and, you know, all these different vital organs.

So then the body thinks, well, I don't have I don't have the ability to, to deal with these things. And I'm continually exposed to these chemicals, you know, where I'm not I don't have time to get rid of them.

So let me put them in closets and let me store them. And then we put them in fatty tissue. The challenge becomes that, you know, individuals is thinking, well, I'm overweight, so now I need to do something to lose weight.

So now you get on a peptide supplement or peptide injections or you, you know, take, go on a 30 day clean or whatever it may be that, that you're doing in order to be able to lose the weight and you just start losing that weight and you exercise really hard, start losing that way to feel good about yourself.

But now you have all these chemicals and heavy metals that were stored enter into the bloodstream as you're burning the fat and you're still not supporting your ability to clear them out.

So the body, as soon as you stop that, or as soon as maybe you you're not eating as clean or maybe you're not exercising as much, you know, the body is going to then gravitate towards storing these toxins again, because it becomes too much of a burden for it to float around.

And then also frequently people then, you know, when they lose that way, you know, they may not feel so good, that may have headaches, they may have joint aches, you know, because you have these inflammatory toxins from the fatty tissue that enters into the bloodstream.

So yeah, part of that strategy is really important to make sure that you remove these chemicals, you support your elementary pathways to get these chemicals and heavy metals out that are stored in the fatty tissue.

So what are some of the solutions to that?

Measuring Metabolic Health and Hormones

If someone's like, okay, I'm doing the things you said, I'm doing the nutrition and the exercise and the other things. What can they do to support, you know, getting rid of some of these toxins.

Yeah. So then then you're looking at, you know, we as, as human beings, we have four ways to eliminate, you know, we have it through our lungs. You know, we're breathing things out, having through our skin, you know, we're sweating things out, have through our urine, you know, so the kidney flushing things out there and then we have it through our bowel, you know, we're we're moving things out there.

So what we really want to make sure that we, we do sweat, you know, so that that way is a good way. So like infrared sauna or when you're exercising, you know, really making sure that you get a good, good sweat on and so that you can move things out there.

Also when you are exercising, I mean, obviously it's great that gyms exist, but if you have the opportunity to be out in nature, you know, to breathe actually fresh air as you are exercising, breathing oxygen in, becomes a really important way also to get rid of toxins and also just kind of checking your breathing, you know, different breathing techniques.

A lot of us, we have these kind of shallow breaths, you know, fast, shallow breaths. And so we're not really able to expel them. The, the toxins and carbon dioxide and things, you know, in, in our breath and breathe in the oxygen that we need to really fuel the mitochondria.

So really kind of check, you know, you have a deep breath and you slow down your breathing. There's a lot of research that shows, you know, the animals that breathe slower, live longer.

So if we slow down our breath, take deeper breath, and then, you know, we were able then to really kind of move toxins out that way. And then from kidneys, I mean, you want to make sure that you drink clean water.

You know what? What kind of water are you drinking? Are you drinking things out of plastic bottles. So you're kind of loading your your kidneys and your urinary system with all that, that plastic, you know, which in itself are endocrine disruptors.

Are you, you know, how are you? How do you filtering your water? I mean, are you living on a farm? And what are the, you know, chemicals, you know, from the pesticides that goes into the water, into the well.

So, like, kind of analyzing what what quality of fluid am I drinking? And then you can bring in herbs, you know, that sometimes can help the flush in the kidneys out a little bit more like corn sale parsley.

Horsetail goldenrod. You know, these are different herbs that are really good to help, to kind of flush out the, the kidneys. And you can use those for a month at a time just to kind of clean them out a little bit.

Then for colon, you know, want to make sure obviously absolute minimum going to the bathroom once a day. Yeah. I had one, one patient, you know, she, she came to me with, headaches and severe menstrual issues, you know, severe pain and fatigue.

And so I, I asked her, you know, one of the questions. So, you know, how, how are your bowel movements? I, you know, have, you know, what's the frequency or your bowel movements that.

Well, they're normal. They're on a regular basis. And I said, okay. So, how often is that? And she said, well, every time I have a period, you know, I have a bowel movement.

So, so obviously she. Yeah, just helping her have a bowel movement every day, you know, made her feel a whole lot better. Yeah. Headaches. The away energy is better than so far.

So supporting your ability to to move, your stool at the optimum is three times a day. It should be that you eat and then you poop. You know, that is a normal. That's how you see animals do.

And that's how you see, babies do, you know, they eat and they poop. And that that is kind of the normal scenario. And so then you can use tools to help to promote that.

Then obviously drinking plenty of water, you know, helps that, fiber rich diet, you know, lots of vegetables and, and, and good quality fruits. And then also, you know, bring in things like, you know, things that support the digestive system, like, like ginger or different digestive enzymes, good probiotic, eating food that's high in probiotic, good quality yogurt, kefir, so forth.

So, so supporting. That becomes really important. And in your strategy as you are, then at the same time, you know, eating better, you know, eating cleaner, exercising.

Yeah. To lose that weight. You know, you're highlighting how complicated all of this can be, right? There's no one solution. Hence why we have, like, 40 plus, conversations as part of this summit.

Right. There's, many things that weight can lead to from, you know, cancer to diabetes. And then there's also so many different solutions and sometimes the, thing that has the biggest impact is going to vary from person to person, right?

So that's where working with a trained professional of some sort can really help you narrow which of all these options we're hearing about are going to make the biggest impact.

But there's probably not just one thing, right? There's not just one medicine or one supplement or one form of exercise or one form of eating that's going to improve metabolic health.

Yeah. I mean, each each one of us, I mean, we're individuals, we're all unique. We have a different genetic makeup. So a lot of times it's good also to kind of check genetically, you know, do I burn protein better than carbohydrates or fats better.

And how do I do talks if I my poor detoxify? Or do I need to support these areas even more? You know, to clean these toxins out and, you know, what kind of nutrients do I need more in order to be able to support then my the genetic snips that I may have.

And in addition to that, if I want to, you know, we we started the conversation a little bit, you know, what do I need to do to support the mitochondria and the mitochondria?

I obviously first clean out the toxins, but then once we've done that, now we are now we have the ability then to bring in the nutrients, you know, that we can, really support it.

And then we want to bring in that good quality, you know, vitamins and minerals, obviously. What are some of the good sources of that? You know, you have the different B vitamins, vitamin B3, vitamin B2, vitamin B1, all B6, you all and B5, all of them are crucial.

Yeah. Things like NAD or Eminem. Yeah. That are also, you know, good for mitochondrial activity. Methylene blue is, is one that's out there as well that you can bring in.

And then also you want to work on that kind of the cell wall membrane to support that. You know, so good quality fats in order to be able to do that and not just a cheap kind, you want to have, you know, find it from a good source, you know, not yes.

Just just your Walmart or something like that. So on all of these. So now when you kind of clean things out, now you want to bring in nutrients and to really to really support the function of the mitochondria. I'm moving back to wait a little bit more in this metabolic health.

From a bigger picture standpoint, when we talk about weight and someone, you know, sometimes we can make people really worried about their weight. And I don't want to add more stress to people's lives.

And sometimes people get these really unrealistic expectations of how much weight they need to lose in order to, you know, say, reduce their risk of cancer.

Do you have a sense or a suggestion of how do we know if someone's metabolic health has improved? How do we know if someone has had enough weight loss that they have reduced the risk of, say, cancer?

Yeah. And it is obviously nowadays we have this image of these skinny models and skinny people, you know, and and that doesn't mean that you are healthy.

Just because you're skinny doesn't mean that you're healthy. And, just because you have a little bit of weight doesn't mean that you're unhealthy. You know?

So it is important then to, hey, look at certain measures. You know what? What is your hemoglobin A1? See, you know, where is that at? You know, where's my fasting insulin. Yeah.

Am I insulin resistant or not? You know, on the fasting insulin you want to keep that fairly, fairly low and hemoglobin A1, C you want to keep that I usually like it below 5.2.

You know like 4.8 to 5.2. So you want to kind of look at these measures to make sure that you are then handling sugar appropriately. And the biggest thing is kind of your, your waist circumference, you know, and that really tells us a lot about, you know, how are you, processing your sugar, you know, are you insulin resistant?

Also, you bring in kind of liver function, plays a huge, huge role in that as well, you know, because the liver, you

know, controls a lot of the sugar that's being released into the bloodstream, you know, in between meals.

So if the liver is dysfunctional, that release is going to be dysfunctional. And it may be too much, maybe too little. You may go hypoglycemic in the hypoglycemic.

And then that leads into kind of the next gland that's really important. Which are the adrenals. And here we talk about then cortisol. And so what we want to make sure is that we are our inflammation level is low.

And we can check that with things like C-reactive protein is a is a good one. But it's not a be all end all. But it it is a good measure. You also want to then make sure that your blood sugar regulation is functioning appropriately, and then you want to check and see where my cortisol levels that.

And you can then check and see good measurement. This is through the saliva or the urine. And you can do that through, you know, several times throughout the day to see, you know, you're supposed to have a little bit higher amount and they're supposed to dip.

And if you have that nice dip, you know, throughout the day, without crashing, you know, then then you're in a good place.

Muscle Mass and Cancer Resilience

So I feel if those measures look good and you don't have, you know, your waist circumference is is where it needs to be according to your height. Then I, you know, you're in a good place, you know?

Thanks. I think that's really powerful to hear, right? Because some people, you know, look at their where they're at on the scale now and, and look at you maybe a BMI chart and say, gosh, that just seems so unattainable, right.

You know, to lose 70 or 100 pounds. And so I always like to bring back to the same things you described. What does the bloodwork show, right? Metabolically, do you look optimized?

How do you feel? Of course. Right. That can be really helpful. You mentioned a lot in the beginning about fatigue and depression and anxiety, and those things have started to improve.

That's often a really good sign as well. And so I think it's powerful to hear that from from multiple doctors that, you know, not everyone has to get to that that skinny model.

Look, not everyone has to get to a normal place on a chart. We're looking for that visceral fat, that adiposity around the way that's contributing to all these risk factors, looking at the blood work and everyone's individual path of of what's a healthy weight is going to be very different.

And you probably need someone from the outside, helping to guide you to, to what is that right weight for you. You mentioned a little bit about, cortisol and insulin.

Can you tell us any more about how those or other hormones, increase the risk of cancer? Yeah. So, in relationship to both cancer and then also the, weight aspect, you know, insulin is a, it's a growth, hormone.

It supports growth and supports storage. Yeah. So it supports, fat storage, but it also in regards to cancer, you know, it promotes and cancer growth as well.

So elevated insulin is as we we want to be able to kind of control that as much as possible. And in relationship to that then we we have the term we mentioned a little bit insulin resistance.

And what does that mean. Well, it just means that the cells are not able to really receive the signaling. Yeah. Insulin is a is a hormone that kind of signals to the cells to open itself up for, for sugars, so that the cell then can use the sugar for energy production.

So if you are dealing with insulin resistance that means that you know, the cells are now resisting insulin, its ability to kind of attach to the cell and open that door for sugar to enter in into, you know, the cells.

And so that can mean that the cells in themself are just exposed to too much sugar, and it just can't have anymore. So now it tells insulin. And you know, we you can't land on me anymore.

I'm I'm too full. Yeah. This is to stop it. Yeah. So controlling obviously your your sugar becomes really important. You know for that your intake of sugar and, but then you also have the cell wall membrane, you know, that the insulin lands on.

And if that one is damaged and, we would talk a little bit about good quality fats. If it's damaged, then the receptor sites that are on the cell is not able to really kind of grab on, and the insulin is not able to kind of lock on to those receptor sites.

And so we need to kind of look at that aspect as well. And so with excessive insulin, then we are more prone to being, dealing with metabolic health disorders and cancer is one of them.

Then we look at cortisol, cortisol as a stress hormone. And most of us deal with stress in some form. And, we look at cancer, in addition to being a metabolic disorder, it is also an inflammatory condition and excessive cortisol.

What we're seeing is very inflammatory to the body. So if we are in a state of excessive cortisol continually, we put ourself at that a higher risk factor of developing things, you know, like like cancer, but even other diseases as well.

You know, you have anything with that. And with itis is an inflammatory disease. Yeah. Arthritis. You know, and you know, you have the colitis I mean, there's so many all the itis words, you know, that, we want to ban and we want to prevent.

So cortisol, how do you control that? Well, since it is produced by stress, then we really need to figure out what can we do to manage stress in our body.

What how is how is our lifestyle set up? What are our relationships? You know, how we're sleeping. So those become really important aspects to address and look at, you know, because it, it does promote cancer and it is very, very hard.

And I see seeing that is again and again to lose weight when your cortisol level is elevated. What is fascinating with weight, you know, just the, the visceral fat, when you have a lot of it, it sends inflammatory signals as well.

So you have cortisol producing excessive weight. And the cortisol in itself produces, you know, inflammatory signal. And then you have the excessive weight.

In addition to that will then, you know, increase inflammation in the body as well. So controlling your insulin, controlling your cortisol, you know, those two becomes very fundamental components, when you're dealing with both cancer, you know, as a risk and then also, weight.

Yeah. You know, one of the things that I've seen in my career is definitely the importance of reducing stress. I've had people where we have kind of tried everything, and at the end of the day when they finally have, their stress reduction go down, maybe they change jobs or they leave an abusive partner or they're finally able to get enough sleep at night, or whatever it is.

Like all of a sudden they everything we're doing sort of adds up and works. And so that's often the hardest part for me, as a physician to help is stress, right?

Because, I don't have a diet or a medication that I can solve that. Yeah, it is hard. There are some kind of nutritional tools that you can use. You know, obviously if you are in a stressful situation, if you have herbs like ashwagandha has been really helpful, you know, valerian at night or phosphate turtles serene at night to help to

kind of break down unwanted cortisol.

Magnolia, passionflower, lithium or était Gaba five HTP. So there's a lot of fantastic tools out there. And to kind of recharge and support your adrenals and help to kind of lower how the nervous system responds to stress.

And while you obviously the ultimate is to change, you know, your lifestyle so that you, are not living in a stressful situation. Yeah, I love that. Like, what can we do to support it?

And then ultimately, what can we do to change the lifestyle? But there's things we can do to support it. In the meantime, I think the last topic I wanted to address with you is the importance of, muscle mass, with weight loss.

So can you touch on the importance of muscle mass in terms of metabolic health and everything we've talked about? Yeah.

Where to Learn More

So they they've seen that, you know, the more muscle mass we have, I mean, obviously, the more muscles, the more mitochondria we have in the system and the more mitochondria we have, the more energy we're producing.

And they the more AB, the less insulin resistant we are. And also, you know, the the more fat we're burning at the same time, and the more and the less inflammation we have.

So muscle mass is really, really become kind of a key component when obviously dealing with, you know, weight loss, but also regards to cancer, they see a direct correlation between exercise and muscle mass and less risk and also more ability if you are diagnosed with cancer to to survive, you know, they've actually seen that 30% you've got is 30% more likely to survive when diagnosed with cancer.

If you exercise and you have a better muscle mass index. So it becomes really, really important in regards to, controlling a lot of the, the different help diseases that we, we have.

And so that's why, you know, we're, we're thinking, well, I just need to kind of burn calories. I just got to run on the treadmill and this is what I got to do, which it is important to to be moving and exercising, running and and those sort of things, but not forget.

And the importance also of, of, you know, resistance training, you know, weight training. And in order to be able to prevent a lot of these different diseases because they, they see that there's so many different beneficial neurotransmitters and chemicals that are secreted in response to it and that are then boosting the immune system's ability to fight off diseases, and then also to then, control a lot of the the endocrine activities that are taking place in the body.

Well, Dr. Karlfeldt, thank you so much for joining me. If people want to connect with you more, get resources. Where can they find you? The best is to to go to our website, thekarlfeldtcenter.com.

And, just give us a call. Yeah. We're we're happy. We? Yeah, we support people. I've been in clinical practice since 1987. So we support people in all areas of of life.

Whether it is for regenerative medicine, which is, the weight loss, you know, supporting tissue repair, anti-aging, but then also then the aspect of, of cancer, integrative oncology, which I have people flying in from a little bit all over the world, you know, where we support them.

So we run we have a big center here where we now have multiple physicians and, you know, a nutritionist and, to support people in all different aspects.

Well, thank you again so much for joining me. My pleasure. Thanks so much.