Introduction to the Functional Edge

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Now you have my money wheel. Welcome to the Functional Edge. I'm Dr. Julia Ward, and this is where science meets real-world strategies for living healthier, sharper and stronger.

From uncovering hidden environmental toxins to unlocking peak performance and mental clarity, we cover it all. Ready to take control of your health and thrive?

Let's dive in. Hello and welcome to the Functional Edge podcast. I'm your host, Dr. Julia Ward, medical director and founder of Balanced Body Function Medicine.

Today we're honored to welcome Dr Warren Wiley to our show. Dr Wile is an osteopathic physician, author, fitness expert and advocate for health optimization who has spent decades helping patients improve their vitality through a focus on muscle health, metabolism, hormones, nutrition and lifestyle medicine.

In this episode, Dr. Wiley will be sharing insights on why muscle, metabolism, and hormones may be some of the most important, often overlooked, factors in healthy aging.

We'll explore practical strategies for maintaining strength, optimizing metabolic health, preserving cognitive function, extending health span as we grow older.

So stay tuned for an engaging conversation that promises to empower and inspire your path to wellness. So thank you very much for being here. Cool. I want to hear this.

Yeah.

Healthy Aging Misconceptions

Awesome. Well, welcome. Thank you. Thanks you so much. OK. You've worked with everyone from athletes to patients struggling with obesity and chronic disease.

What do you think most people misunderstand about healthy aging? I would say at the top of my list would be they think their wellness exams with their PCP does something.

Right. You pass your wellness exam, that doesn't mean squat to your health people. Sorry. That is an insurance-based check the box procedure that does not work.

I think the other thing people, I, think a lot of people that I've known, they feel it's too late. And I think it's never too late. Or maybe it is a pill.

I need that magic drug, right? Like the phenomenon we've been seeing with the GLP-1s lately. Those are not new. They've have been around since the 90s.

But I would say I don't have time was another excuse I've heard. And yeah, I just think that it was a misconception that health is I do not have disease, therefore I'm healthy.

Yes. And that is a terrible, terrible misconception. Terrible. Yeah. Just like people who, you know, ask about diet and they say, I have a great diet because I don't go to my local fast food place.

Like, yeah. Exactly. Well, well, exactly. I do not eat McDonald's, so I must be healthy. Burger King is not healthy, sir. Sorry. Well, you often hear people focus on cholesterol, hormones, or supplements, but not muscle.

Why do you believe muscle is such a critical predictor of longevity and health span? Oh man, you might be in trouble. How long is our podcast? No, I'm just kidding.

I think people's first thought is just to prevent decay, prevent being fragile, fall risk, all this stuff you hear about muscle. But in reality, it's the production of myokines.

And a lot of people don't understand that when muscle contracts, It releases myokines that are absolutely essential for everything from cognitive health, immune system function, gut health.

Oh my gosh, myocines control everything. And people don't realize that the muscles are actually your biggest endorchological organ. I mean, it has paracrine function.

It has endocrine function It is an endocrine organ And if you are contracting your muscles via weightlifting, via some sort of exercise, everything from fat loss to cognitive health to building the said muscle, cardiovascular health, preventing cancer, I mean, there's studies on these myokines that show that is really the secret to longevity.

If you look at blue zones, I'm sure you're familiar with those doc around the world.

Why Muscle Matters for Longevity

If your listeners don't know there's five blue zones and they're basically just groups of centurions. People that live a hundred plus years are still completely active.

No disease, no drugs. And a lot of people would say it's their diet, because they're mostly a vegan type diet. But I would argue, I'd say, it is the fact that they move and they use their muscles.

Yeah, they are always moving. That is a secret to it, is muscular contraction. So, muscles have far been put on the background of stuff, but I really think it needs to come to the forefront, especially in healthy aging.

Yeah, absolutely. How does loss of muscle mass contribute to many of the problems we associate with aging, such as weight gain, insulin resistance, frailty, and loss or independence?

The Western medicine term for that is sarcopenia. And they call that the natural loss a muscle over time. It's some number like starting at age 37, you're expected to lose one pound of muscles a year, whatever.

That is horse pucky. Sarcopenia is the fact that you don't move and you're not flexing your muscles. And you know, exercise-induced myokines change the immune environment.

They change it from a very pro-inflammatory state to an anti-inflammatory state by changing interleukin-6, interleucin 6-15, irisin, all these, these mild kinds that actually reverse the internal environment from, again, a pro-inflammatory state to anti inflammatory.

So I think loss of independence, weakness, and all this stuff is a function of not moving more than anything else. Yeah, yeah, absolutely. Many people assume their metabolism slows simply because they're getting older.

Is aging really the problem or is there something else happening beneath the surface? I kind of have a pet peeve, if

you will, about the way we have criminalized aging or made it pathologic.

And it does not have to be pathological. The word metabolism to you and I, Dr. Warder, are very different from one my patients. If I ask my patient or I hear from them, my metabolism slowed down, I gained weight.

I look them in the eye and say, define that. They go, well, uh, you know, maybe someone responded to say, I don't burn the same amount of calories I used to, but really metabolism is a sum of all the chemical reactions in your body, everything that maintains life.

That's your metabolism and metabolism. Very modifiable by your lifestyle, by optimizing hormones, optimizing gut health, getting out of sleep, controlling as best you can cortisol.

And the stress hormones and the catabolic breakdown hormones compared to the anabolic or build up hormones. That's what metabolism is. So metabolism, is a multifactorial thing that's that you really can control and dictate.

You're not doomed to lose your metabolism as you get wiser. I didn't say older because I'm actually not that old. I am just very wise. So just to make that clear to everybody.

But yeah, that's an important thing to understand because a lot of people and back to, I think your first question was, people throw in the towel thinking, well, i'm 64 now and I just don't have the materials I used to.

It's not going to worry about it. And that is wrong. Yep, yeah, absolutely. Yeah, we spend a lot of time talking about weight. How much more important is body composition than the overall number on the scale?

Oh, gosh. You're going to put me on another pedestal. I'm going stand up and start preaching here.

Metabolism, Body Composition, and BMI

So I've been doing body comps as long as I have been. Well, before I went to medical school, I was a personal trainer. Even before there was an ACE certification, and I teaching people how to exercise.

And we did body comp. We would do Jackson and Pollock's three-site skinfold measurement as our method of bodycomp to differentiate fat mass from lean mass.

And really, the scale is not your friend. It does not differentiate that. it means nothing. The fact that our entire Western system is based on a height-to-weight ratio called BMI is terrible.

I mean, I'm about 8% or 9% body fat, but according to my BMIs, 34%. I am super obese. I qualify for bariatric surgery right now. It's ridiculous. You have to differentiate that.

And right, now there's so many, you know, we did this skin cold calibers, but I've had a BOD pod. I had had DEXA scan. We do CT scans. They do bioimpedance.

However you measure body comp, I would encourage everyone listening. That is the number you need to follow. Especially, and I'm sure we'll probably get into this doc about with the GLP-1s.

it, you lose muscle mass real quick on those, especially semaglutide, which is Ozempic or Wygovy. And I think if you're not following your muscle, mass while you are on these drugs, You are doing way more harm than good.

So, to answer your question, it is absolutely vital to know your lean mass versus your fat mass. Yeah, absolutely. I've always found that we have a bioimpedant scale here at the office, and that's always been key and essential, especially when treating hormones.

Because, you know, for women too, I find that the overall number on the scale doesn't change right away, but the body composition definitely will change.

And especially if you're careful with your diet, you will see an increase in muscle mass and a decrease in body fat. But yeah, absolutely, I see a lot of problems with people on GLP-1s who just stop eating because they have no more appetite, and then they start burning all their muscle-mass.

And their overall number may go down, but their muscles- mass has gone down and their percent body-fat has come up. So it's sort of the wrong combination that we're looking for.

We have to be careful about, you know, making sure that people are eating good quality protein throughout the day when they're on that. Absolutely. Yeah, the classic skinny fat person.

Yes. Those are the ones with more disease than just the fat people. At least I've always shared with my people that struggle with weight and obesity. I tell them, hey, you're actually blessed because your body's giving you a warning.

Yeah. The skinny people who come to me and their percent body fat's 52%, they're in big trouble and they don't know it because their body is not warning them.

So consider it a blessing if you put on weight when you are not eating or exercising because that's a Exactly. Now you can do something about it. Yeah.

Yep, exactly. And the way I explained that to him is I just saw a little visual here using my hands. If this is your scale weight and lean mass, if your lean masses going up, fat mass is going down, well, that scale might not change at all until your lead mass hits what I call your genetic ceiling.

In other words, a wonderful, beautiful woman like you is never going to look like Arnold Schwarzenegger. You're never going to get that much muscle. But once you do, then you see the scale drop because the fat mass keeps going down.

And so for those scale dependent people, especially people older, my generation and even older. The scale is still the father of my health, the truth teller.

the soothsayer, the whatever you want to call it. But the scale, if you do it right, will not change initially, but your lean mass to fat mass ratio will.

Yeah. So hormones are receiving a lot of attention right now. In your experience, where does hormone replacement therapy truly shine and where do you think expectations can become unrealistic?

Okay, so hormones have a great history all the way back to the 1800s when a farmer was claimed to grind up desiccated pig ovaries and feed it to his grouchy wife, right?

They've been around for a long time. Testosterone was invented in 1935 by a couple Germans. We used to replace hormones starting in 1939 using pellets.

There's a long history of hormone replacement, and it's unfortunately in 2002 when the Women's Health Initiative came out and criminalized estrogen in particular.

I remember that day, Dr. Wardlike was yesterday, I had an anti-aging clinic in Colorado, it was also a full health club and a med spa. And I pulled into work that morning.

faithful early February morning, when the USA Today had in capital letters, I still have this actually, estrogen causes cancer.

Hormone Replacement Therapy and Common Fears

And I had a line of women at my door scared to death. Yeah, yeah. Oh, you've had me on hormone place and I'm going to get cancer, cancer. I think now with, with RFKs work and every, and finally people realizing that hormones

are not a bad guy.

They don't cause this issue. And the reason I am telling this story is to, to to your question. That's one of the problems with it. There's still a lot of fear out there.

with it that is unneeded and certainly unproven now that we have more truth and access to some better studies and whatnot. So hormone replacement is, I think, absolutely vital and not just for symptom management.

Symptom management is a Western medicine process, where I give you a drug to control a symptom, knowing you're going to be back because you are going develop other symptoms or you will develop problems with the drug I gave you to treat that symptom and now I have you.

Now you have my money wheel. Hormones, they are important metabolically, important for preventative medicine. Estrogen, for example, protects your brain, your heart, and your bones.

testosterone, cognitive hormone. There's just so much benefit to hormones that I think that fear is a problem with it. And some of the expectations too, again, back to your question, I there's enough now with social media and everyone being an expert on perimenopause in women, that it's the cure-all.

That's not true either. Right. How many times, Doc, have you seen someone goes to another hormone provider, a mid-level that took a weekend course at A4M and now they're hormone certified, right?

And they felt great for the first three months doing their hormones or after their testosterone pellet. And then they feel horrible again. That's because you didn't take care of what I call the background.

And the back ground is, what is there anything else doing? How's your HPA axis? how's stress affecting your life? What's you gut health? Do we have to be concerned about toxins in your environment?

what's oxidative stress? How much senescence do you have going on? You take of that stuff and now hormones fit right in there with it and they can benefit people.

So I think the expectation of it curing everything is just so much of an issue as the fear of And I think fundamentally why there's so much misinformation about hormones in general is that as doctors, we were never trained on bioidentical hormones.

And in the Women's Health Initiative study, they never made a distinction between synthetic versus bio identical hormones, you know. I never realized until, of course, were out of the system, how much of what we learn in medical school is controlled by big pharma and the insurance companies.

They have really no interest in us. doing bioidentical hormones because they're not making profit off of that. It has to come from compounding pharmacies.

So I think that's part of the problem. And so you get a lot of misinformation or zero information from traditionally trained doctors who haven't been through any kind of training.

That's where a lots of fear and misconceptions come. Yeah, totally agree. Yeah. So how do you determine whether a patient's symptoms are primarily hormone related versus being driven by lifestyle factors such as poor sleep, chronic stress, inadequate nutrition, or lack of exercise?

That's kind of a chicken or the egg question. Yeah, because they're all that that list you just gave me cause a hormone issue or do the hormone issues cause that lists?

Yeah. I think that's that hard and I Think part of being a long term practitioner and hormone replacement like you and like me have been is being able to listen to the patient and hear what it is and I'll come back to my what I mentioned earlier what i call the background and i have a book i haven't released yet called the Background Check

and it talks about that exact thing that these hormones will do wonders for you when your background has been checked and all these other issues are taken care of.

Yes you have the natural decline of of hormones with a menopause. There's so many xenoestrogens out there causing our women to be younger and younger.

I mean, right now, the agreed upon number is age 51 is the average age for women that go into menipause, but remember, it's based on a clinical event.

menstrual cycle for 12 months, it has nothing to do with the hormones. It's based on a clinical event. And how wrong is that? I mean, yeah, the hormone start changing 15 years prior to men's stop.

Yeah. So I think hormone replacement is a great door to open to get started to help good people feel better. Cause that's another thing I've learned. Doc is the first 20 plus years of my practice, I used to diet, exercise, diet exercise.

Diet exercise here's an eating plan. Here's the exercise routine. I'll come to your house and help you. Uh, my dietitian used take people to the store and teach them how to shop and stuff.

But honestly, they have to feel before they're going to change their diet and exercise more. And hormones is a great way to do that. They can feel better and now they're going to start taking on the lifestyle I'm preaching.

And then now we're rolling with it together. The hormones are working better, they are feeling better so the hormones work better. You see what I am saying?

That's the way I think it needs to be approached. So back to your question. I kind of get a tangent a lot. Sorry about that! That's okay. Your question being, I think was, which came first, the chicken or the egg is what I brought up.

Lifestyle, Hormones, and the Background Check

I would say that hormones start to change in everybody at a different lifestyle or life stage. And so treating that initially is a great place to start and then work on this, everything else I just discussed.

It's just a great door because it helps people feel good right away. It gives you that sort of jumpstart of like, oh yeah, this is what it felt like. Kind of, like my old self.

Now, some people need a little more support. And that's what I've found over the years is that, you know, in the past I would treat patients who say, I only want my hormones tuned up.

I don't want to deal with my gut health. And we would do that, but they were the ones that would come back and say, yeah, I had the pellet therapy and I didn't feel any different.

And it's like, well, there's a lot of inflammation going on in the background that we just really haven't addressed. I think that is what's causing you not to feel the effects of this.

So it definitely, you have to do the whole picture because hormones are just one tiny part of your whole bodily system. It's not a magic thing that's just going to make everything suddenly resolve, yeah.

Do you think that strength training by itself can improve hormone balance and metabolic health even without hormone therapy? Absolutely, to a point, especially in that perimenopausal range.

Yes. Resistance training in particular, because again, it sets up that anti-inflammatory state via the myokines I mentioned earlier. Diet, huge about it.

My favorite hormonally regulating diet is what I call modified carb drop or macronutrient shifting diet. where I may have a patient do a low carb eating plan for two days and a high carb.

Eating plan one day and then repeat. I've really seen great results with all the hormones with that. And I think that goes back to the whole effect of the inflammatory state that I'm changing with eating program.

They still get to have some of their favorite foods on that higher carb day, but they're resetting that oxidative stress and that inflammatory process with that type of eating plan and then add the, again, the muscle contraction on top of that, where the myokines are changing the inflammatory, pro-inflammatory state to an anti- inflammatory state.

I think you can make a huge difference. Now, that being said, once the ovaries have completely puttered out, now we need hormone replacement. And you can exercise all you want, you're still going to feel good.

Right, right, yeah, absolutely. So there's growing recognition that metabolic health and brain health are closely linked. How do muscle mass, insulin sensitivity, and physical fitness influence cognitive aging?

Oh my heavens, huge. One of the mild kinds I love talking about, and I borrowed this term and it's not my personal one, I cannot think of an author who said it first, is brain-derived nootropic factor.

That is a mild kind. And brain derived noootropic factor, we can liken to miracle grow for the brain. It causes dendritic pruning, it causes growth, and they've shown hippocampal changes actually in size with exercise, muscle mass, affecting insulin resistance.

I mean, what do we call Alzheimer's? We call it type 3 diabetes, right? So these affect the brain as much as they do every other body part when you incorporate the resistance training and build your muscle mass following that muscle, mass to fat loss, uh, with body composition.

It is a powerful tool for the noggin. I mean, just powerful. And I could get really detailed on some of the other myokines that affect the brain, even peptides and stuff that we use to optimize brain function.

Strength Training, Peptides, and Cognitive Health

But I still think the basis starts in hormones and movement. Yeah, absolutely. That was going to be my next question. Do you use peptides like BDNF in your practice?

Oh, yes. I've been using peptids. Oh I got certified in peptide therapy way back, probably 2014 or 15, maybe even before that. Very, very use them all the time.

They're one of the coolest things out there. And just a definition for your audience, if they don't know, peptides are short chains of amino acids. By definition, 50 amino acid or less.

And so if you have a steak that's made of an amino-acid, the peptide are kind of in between there. They're cell activators. The work the cell membrane, they work with the mitochondria, and they can literally change your life.

I mean, life-changing, where there's cognitive function, building muscle, burning fat, treating the immune system, and treating gut health. I'm a huge fan.

sort of an overall picture. Like nobody's going to just use peptides by themselves without changing lifestyle or diet or exercise. You can't peptide your way out of a bad diet, or not exercising.

They're not going be just the miracle kind of cure, but they can do some really important changes. Yes. Oh, I love them. I could get into specific assigned any if you want to talk about them, but that just goes to say they are powerful tools in our armatarium.

Yeah, absolutely. Well, so if a healthy 45-year-old came to you and said, I want be healthy, active, and independent at 85, what would be the most important things that they should start doing today?

Weightlifting. Everyone should be weightlifting! I think that's where I would start with. And nothing major, nothing,

you know, we kind of have this misconception because not only is Big Pharma and the AMA multi-trillion dollar business, but so is the fitness industry.

Yeah. These fitness experts saying you need X amount of protein and you exercise this many hours a day and stuff. The Myokine research says there's a Intensity is the key.

If intensity is not the Key, then duration is a key and really my prescription exercise program for a 45 year old or an 85 year-old would be to start with resistance training that goes to failure, not with lots of weight.

Sometimes it can be rep induced. That's a short duration. So 20 to 30 minutes, three times a week can do absolutely be life changing. If intensity is harder to do because of physical limitations or, or disease states, then a longer duration does the same thing, releasing these mild kinds to stimulate all these hormonal and anti-inflammatory actions.

doing some sort of resistance training, maybe at-home Pilates on the floor, yoga, resistance bands, you don't have to join a gym and watch people that are wearing less cotton than on a Q-tip exercise.

You can do it at home with some great resources on YouTube and you will notice the difference quickly when you start. It's amazing how the body responds.

That's awesome. Well, after decades of helping people optimize their health, has your definition of successful aging changed? And what does aging well mean to you now?

If I had a term to sum up successful aging, it would be quality of life. If you can help yourself improve your quality life with my direction or coaching, then that's exceptional aging.

Longevity, that a tougher one. Yes, we have a lot of research on telomere lengthening and low calorie diets to extend lifespan and stuff like that.

Aging Well and Where to Learn More

But in my opinion, I don't care how oath you are, when the good Lord says you're out, you out. Right? So let's have a awesome quality of life as you getting up there.

And so I would say after 30 plus years of doing this, it would be, I'm less reliant on markers such as blood work, even body compass stuff as I am. What's your quality life?

Are you enjoying life, do you have good relationship? You're getting out of the house and being social. Are able to get up off the ground without using your hands.

Simple little markers like that are signs to me of better aging than biomarkers I may test when a patient starts a program with me. So that's what I would say has changed for me over the years.

That's awesome. All right. Well, if people want to check out your clinic, get in touch with you, where should they go? My clinic websites TMC-Idaho.com TMc-idaho.com stands for the metabolic clinic of Idaho and then my other websites Dr.

Willie drwiley. com You can contact me through either one of those resources or I have a lot of patients very blessed to get patients fly in from all over the world actually I just had a guy here from Dubai actually and We're kind of a resort area where I'm two hours away from Yellowstone National Park.

Two hours from Jackson Hole, four hours way from Sun Valley. So we have a lot of people fly out, spend a couple days with us as we're tuning them up and then they go play with their family.

I've taken patience, even though I am more busy than I want to be, I just love this so much. If I can ever be of help

to anybody, then I would be honored.

That's awesome. Well, thank you so much for joining me today, and we'll put all that in the show notes for everyone for the recording. Awesome. Thank you everyone, for joing me on the Functional Edge.

I hope today's episode gave you fresh insights and practical tools to level up your life. If you found value in what you heard, don't forget to hit the subscribe, share the podcast with someone who needs it and leave a review.

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And until next time, stay strong, Thank you for joining me on the Functional Edge. I hope today's episode gave you fresh insights and practical tools to level up your life.

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