Cardio vs. Muscle in Weight Loss

Weight loss forever was eat less and move more, which was really talking about cardio and not muscle, not resistance training. So cardio burns calories and to some extent you're using your muscles, so that's good.

If you've got some weight bearing for your bones, that is good, if you are swimming, you definitely using muscle and you doing some great cardio, but you not helping your bone out much, your joints are loving you for it.

There are pros and cons there. Anti-cardio, of course, but what you want is that resistance training protects against muscle mass because if you're doing cardio and eating less and losing weight, that just kind of means your body's eating itself, right?

It's, eating hopefully your fat stores primarily, your glycogen stores and all that, and it's also eating muscle. And the way that you prevent that. is resistance training, hormone replacement, and some peptide stuff we'll get into.

There's devices to help you with that. Welcome to My MD Unscripted, where healthcare gets personal and the script gets tossed. I'm Dr. Clint Carter, ER doctor turned direct primary care freedom fighter on a mission to challenge how our healthcare system treats patients in America.

In every episode, my expert guests and I dive into real conversations about what's broken and how we can fix it by making healthcare about people, not just managing disease.

It's time to rethink what healthcare should be and we how can make it better together. Welcome to the ByteCast. Hey guys, and welcome back to the My MD Unscripted podcast.

I'm your host, Dr. Clint Carter.

Why Muscle Is the Bodyu2019s Metabolic Engine

And today we are going to cover a topic that is near and dear to my heart. You know, in medical school, every new lecture about a new organ was given by a doctor that specialized in that organ, right?

So the neurologist would tell us about the brain, the nephrologist will tell about kidney, et cetera. The most important organ, and this is why, right?

The cardiologists would come in and be like, obviously the heart's the most. And then the liver guy would came in to be, like the hearts not worth much if you don't have a liver.

So they, you know, there was constantly, no, we would just pretend to agree with the professor that was there that day. Right. But what if I told you that the.

Most important Oregon that you are completely ignoring that has to do with your metabolism, your longevity, even how you look. isn't your heart or your brain or you liver, but your muscle.

That's right. The muscle in your body is an organ. And it's not just to move the bones around to, to for the puppet show that is, you know, the marionette of you trying to walk.

This is really about what the muscle does in your body. It's not just aesthetics, it's just strength and being able to get things done to survive. You know, its really about how you feel.

And the reason it is about you how feel is because it does other things in you body, so the muscles is actually an

endocrine organ. That means it in charge of hormones, largely metabolism.

There's things called myokines, which are just signaling molecules that are released by the muscle. Myo means muscle, and so this controls blood sugar regulation, inflammation, hormone balance.

you know, the metabolic idle, if you will, of how many calories you're burning and how much activity you can tolerate. It's more muscle equals better insulin sensitivity, right?

So, diabetes is a disease of insulin resistance or less insulin-sensitivity. And so, Working out independently of what you eat changes makes you less diabetic just because of the way that it affects your muscle.

Your more muscle means a lower risk of chronic disease. Well, we are increasing your metabolism, increasing, your hormone balance, decreasing inflammation as a whole, which overall, slows down your aging process, right?

So less muscle means faster aging trajectory. As you lose muscle, you look and feel older. We'll get to that a little bit more in a minute, but basically muscle is your body's metabolic engine.

So why do we care? Right? Like you're like, either I'm kind of a, not everybody's a workout person, quite frankly. I work out. Because I'm supposed to, not because I love it.

I pay a trainer to help me work out because, I know that if I am not paying a training and I don't have a group that's going to give me heck. If I do not show up, then I will always do something else.

So I mostly pay trainers so I have someone to whine to the whole time. And then there's always some tyranny of the urgent in between it. And this is not a podcast about why you should work out.

Let's, let's be clear. This is really more talking about. Why you shouldn't do what makes sense in your world to preserve the muscle you have and build on that if able.

How Muscle Supports Longevity and Health

So the big part of that problem is that. In America, we've got a relatively sedentary lifestyle, right? We have a relative unhealthy diet. We've covered that egg nauseam and other podcasts and that kind of thing, but of course the gut and the inflammation and all these things in our diet, all the carbs, the processed carbs leading to insulin resistance and those other things.

So we're always a little bit overweight, which means we are always trying to come up with some fad diet to try to get rid of it. And, or in this case, we actually have medicines that are relatively healthy and work really well in the GLP-1 class with semaglutide and tercebitide, and those guys.

But you know, what's the downside? You lose significant muscle mass if you're not careful. Significant weight loss of any kind loses muscle, mass, if your not care.

So what we want is to. talk a little bit today about, you know, why that's bad other than cosmetics, right? Everybody knows about ozempic face. You know that you lose all that volume in your face, including muscle mass and everything sort of falls and all of a sudden you get, there's the skeletor jokes and those things.

There's ozipic butt where, what used to be rounded and more attractive is now flat and fallen. I never had rounded or attractive down there, so I don't have to worry about that.

A zympic butt is kind of something I was born with. But for a lot of people, that's a really big deal. And the reality is if you lose a significant amount of weight, you're losing 25 to 40% of that weight loss is muscle.

crazy. We're also, we're in a generation or four now of hormones are quote unquote bad. And so if you're a man or a woman of a certain age and you are not replacing hormones to some degree or another, you really at risk of

losing muscle faster than your friends and family that have a more balanced hormone picture.

So weight loss is thought to make you healthier, but if weight loss includes losing a significant percentage of your muscle, you're actually just aging faster.

So we have to be smart about this. What does that mean? So if muscle matters for longevity, what are we even talking about? Well, we talked a little bit about insulin sensitivity, which is really about glucose disposal and storage, right?

So you get a sugar in your cell, in you blood flow, and so that sugar is supposed to go into a cell to feed the body, give it what it needs, but that's sugar can't get into the cell unless there's an insulin with it.

A sugar and an goes to a normal receptor and the receptor says, I see you come on in. Well, if you are losing your insulin sensitivity, whether it's sort of that sedentary lifestyle, that loss of muscle mass, or it is just a high carb diet, you're moving towards pre-diabetes and diabetes.

and all of that stuff. Then all the sudden, your insulin receptor is a little bit blind. So now you need two or three insulin with every sugar. And you know what?

The more insulin you have, the more blind your receptor gets. Now you'll need more Insulin. More insulin means your receptors get a bit more of a blind, and so you go down that spiral, right?

But what's fun about that is it's a completely reversible process. You can instantly stop eating as many carbohydrates in this case so that you get lower sugar in your blood.

So you need less insulin so your receptors can be less blind. Now you'll need more insulin, so you receptors will be more blind, well it's not just eating less carbs, it can also be exercising and burning calories.

In this example it could be resistance training and building muscle which decreases insulin resistance immediately. There are so many just your body is such a complex machine when it comes to how everything works that you just, that's why one diet doesn't work for everyone.

That's the secret to weight loss has been such as secret because it's different between people. Another reason that muscle matters for longevity is cardiovascular protection.

The more muscle mass and strength you have as you age, the lower your mortality is all cause mortality including cardiovascular. There is two kinds of exercise, big picture.

There's, you know, if we were to categorize, there's movement, which is great. And then there is exercise which great, exercise let's break it into two parts just for discussion purposes.

You've got cardiovascular exercise where you're running, biking, swimming, walking, briskly for some period of time so that you demand that your heart rate go up.

It's cardiovascular challenge, right? So it's called cardio. But what we're talking about is burning calories and building heart health. That's the idea, which is good.

Resistance Training, Protein, and Hormones

However, when you're done with that, your metabolism starts to fall right back down to where it was before you exercised, if you are doing cardio regularly.

then you can increase your metabolism just by convincing your body that you're an exerciser. It's fairly significant, up to 20% more metabolism, just from exercising.

But a lot of that is when you do add-in resistance training and you build and or maintain, but you know, if you are young enough and your own hormone replacement as well for the middle and older folks, you could actually build muscle mass.

And so, increasing muscle-mass, just increases your cardio fitness as well by decreasing your insulin resistance and the myokines that get released as.

Well, which brings us to how it affects cognition. You know, exercising and building muscle mass protects the brain. And that makes maybe no sense at all to you, except that if you've gone from a time when you weren't exercising regularly and you were losing muscle, mass, and, you felt tired and you just, you felt, started to get depressed.

You weren't able to think as clearly your, said that complex machine in your body was starting to shut down. And so building that muscle mass, the release of those myokines, that the effect that it has on your mental, physical, metabolic, all these other parts of your.

Body come into play. Then just having muscle and strength decreases your fall risk when you get older. It protects your knee, even if you're young. The best thing you can do for your knee, if you're playing sports, as a, you know, high school, college, 20 something athlete, when you are supposed to be, very much in your prime.

There's so many, so, many knee injuries these days. The BEST thing that you could do to protect your knees is to build up your quads and your hamstrings, right?

That's the stabilizer, the muscles are the stablizer of the joints. So it's injury prevention at any age, and then just quality of life. And when we talk longevity, there is data that suggests that your grip strength at age 60, 65 directly correlates to your life expectancy.

I don't even understand exactly how all that works other than this is how the body was made. And when you start losing strength, things start shutting down and then things are breaking.

And whether it's going to be a stroke, a heart attack, cancer, whatever it is going be, your life expectancy starts dropping. At some point, we're all going on the floor unable to get up because we just don't have the strength.

We want to push our goal as a clinic and as advisors to our patients is to put that back as far as possible. I want your quality of life. to equal your quantity of life.

And I want you to feel well and be as healthy as possible until you finally fall off that cliff. Weight loss forever was eat less and move more, which was really talking about cardio and not muscle, not resistance training.

So it burnt, cardio burns calories and to some extent you're using your muscles, so that's good. If you are running, you've got some weight bearing for your bones, that is good, if you were swimming you definitely using muscle and you doing some great cardio, but you not helping your bone out much, your joints are loving you for it.

There are pros and cons there. Anti-cardio, of course, but what you want is that resistance training protects against muscle mass because if you're doing cardio and eating less and losing weight, that just kind of means your body's eating itself, right?

It's hopefully your fat stores primarily, your glycogen stores and all that, and it's also eating muscle. And the way that you prevent that. There's resistance training, hormone replacement, some peptide stuff we'll get into, there's devices to help you with that.

So cardio is definitely a tool, but the strength and your muscle mass is the foundation. I mean, if you want to get kind of into it a little bit of all those folks who on these yo-yo diets, they lose 40 pounds and then they gain 40. And then, then lose 30 pounds, and they gained 30. Well, it's actually.

That's not a net neutral. What they've done is they lost muscle mass every time they'd gone through that weight

loss phase. So overall, when they gained the 30 pounds, they gain all the fat they had before plus the extra fat.

because the weight loss, some of that weight lost the first time around was muscle mass. And muscle mess isn't what you gained when you stopped your fad diet.

So there's a net negative with these sort of yo-yo diets and especially if we're not protecting our muscle muscle. Let's think about how we should think muscle, so we want to prioritize resistance training.

I would love a couple of times a week, four times if, you know, if you're, the more you get into this, well and safely, but ideally I would love some resistance training a couple of times a week.

If you want to mix in cardio with that, if you wanted to do a little bit of go on walks on the other days, however you wanna do it, it doesn't require a gym.

We're talking about body weight stuff, especially at first, pushups. are really hard if you haven't been working out and people that talk about, you can just do pushups.

It's like, maybe, but a pushup is really. If you have it in working and you're a little overweight or, whatever, then. Lean up against a wall and do a push-up or that's too easy.

Get up, against the bed and something about halfway down and then do it push up. The hardest pushup is on the ground or more, but air squats and you don't go all the way down at first.

You just start moving those joints, make sure your joints are working, let's start. building muscle mass, core strength, especially, right? So in the gym world, we say curls are for the girls, like I need to work out my chest and my abs and butt and legs because those are my core.

That's what's going to keep me strong. The biceps and the triceps, and then the pretty muscles, those curls for girls. But really, let's be honest, the curls were for boys.

We like to look good. And the girl are probably much less interested in that than you think. At least that's what I keep telling my son who seems to think that if he just gets ripped then they will swoon.

Protein, if you're going to build muscle, you need protein.

Body Composition, Devices, and Closing Takeaways

So a lot of the times people go on these weight loss phases, they just don't eat enough protein because they're not eating enough calories at all because the idea was a calorie deficit.

Not all calorie deficits are bad, but you to have a protein first philosophy. Get full on protein, start your day with protein You can have carbs in there.

You need carbs for fuel unless you're going straight keto, you know, that kind of thing. Are you doing the carnivore diet and all those other, more extreme strategies, which work well for some people.

But the idea is let's just assume we're not going to go that big on one way or the other. Then I certainly, I mean, if you are going go big, go protein big.

What's really hard about Vegetarian and vegan, it's just so hard to get enough protein. It's especially vegan. I'm not saying it is impossible, people do it, but it really hard.

carnivore, keto side maybe, but really what you got to do is just have a protein first philosophy, limit your carbohydrates to enough to fuel your workouts and your lifestyle and then keep moving and doing some resistance training.

Weight loss is when you're at your muscles at the biggest risk. Obviously, if you are not in a weight loss phase and you just, you know, So you were working out and then you injure yourself and you don't work out for a few weeks.

You can watch the muscle atrophy. That's a lot of us have been through that. So just assume that if you're doing that and your trying to lose weight, especially with the GLP-1s, that you are really at risk of losing more muscle.

Especially if your, if, you dont have good hormone levels, which when youre young you probably do. As you age at some point that starts to fail. And so being careful with weight loss after the age of 40 especially, then we need to take a close look at your hormones and make sure that we're doing what we can to look.

And then also weight loss. Weight isn't the answer, right? You don't need to lose weight. You need fix your body composition. So we're not into weight loss.

We don't have weight-loss protocols here. we have body composition repair protocols. To be honest with you, we will put you on a machine that you don, your scale at home is a liar.

It's, it's not even a lie. You're just dumb. it just, It doesn't know the difference between water, fat, muscle, bone. I mean, if you lose weight, If you weigh yourself.

Before you go to bed and you weigh yourself when you wake up, you will weigh less when wake you up. Okay. Well, what happened? Well, you hadn't had anything to drink in like eight hours or more, and you haven't anything eat.

So, your body used something for fuel, but you didn't lose a significant amount of fat, right? We're burning something. And so mostly the difference between the two is just water weight because your has enough glycogen stores and stuff to get by.

But over time, if you're losing weight fast enough, that's when the body's going to start replenishing its stores in burning and eating up that muscle mass as well.

What we have and what many clinics have is a body composition device, right? We have the STIQ, which uses infrared technology. There are DEXA scans. Your gym may have one, your doctor's office may one.

What I like about the StiQ here at MyMD Select is that it can It's measuring your muscle percentage and your fat percentage. And you know, actually it measures your lean body mass, which is what they all want.

It is really what we want to know versus body fat. But the Saiku also gives you kind of a 3D, like very precise measurement so that as you lose weight, we can make sure that we're losing weight in the right places.

We can actually see the posture as we build muscle and lose fat, and we actually can see that the body changes. But the main thing I want to know is that you're not losing weight because you are eating muscle, especially if you've been on a weight loss journey for a while and you were trying to get those last five pounds off because somewhere in your head you made this arbitrary goal of this weight.

And you're really running out of fat to lose. Yeah, you got some loose skin and whatnot, but you know, if I could get to 140, I'd be really happy. Well, at some point you are going to get 140 because you losing muscle.

So I just want to make sure that you, know what's going on. You're not trying to loose weight, You are trying lose fat. And really quite frankly, what does that tell my patients?

When you start working out, your probably going have to adjust your skinny weight. Right? Everybody has their weight they want be at when they're skinny.

But if you gain five pounds of muscle, i need you to move your skinny weight up five lbs. that you'll have the same or less fat at five pounds heavier if you have muscle to carry that around and burn those calories.

So, you know, hormone optimization we've hit on. Peptides are really great. There are growth hormone supporting peptides, there's inflammatory decreasing peptide.

All of these things are going to help with weight loss and protect muscle. And then we have devices at my clinic that are also great, like In a weight loss journey, one way we protect core strength is we have a chair called the MCELLA that builds the pelvic floor, which is definitely wasting away during a weigh loss.

A lot of people don't know that they have weak pelvic floors until they lose enough weight. All of a sudden, they'll have little incontinence when they pee or they're getting up more often at night to use the restroom, things like that.

They have some sexual changes. Or, obviously, we had a device here called MCULP-NEO that will build muscle in the legs, the butt, that abs, you know, and melt fat at the same time.

Cause you, know as you keep chasing that last little bit of fat on the, on your spare tire or in your inner thigh for the ladies or whatever, in order to get the body to, get rid of that, last, little, bit that it's trying to protect because it thinks it storing that for, for famine, it just doesn't want to let it go.

And we're here to tell the buddy, there is no famine. It's okay. You can let that go, but in, process of trying, to lose that weight, is going to have to continue to eat muscle.

You know, it's not going to get rid of that fat until it has eaten some muscle as well. And so by putting a device on there that protects the muscle, builds the muscles and melts the fat, that sort of helps finish off that process.

It's great to do it along the way because you're burning the fats and building the muscular as you go. The muscle is losing weight for you as your go and the technology actually tightens the skin somewhat.

So the tech is a fun addition to weight loss if the tech is also building muscle. So one difference between the Emsculpt Neo and say CoolSculpting is Cool Sculping is freezing fat, but it's not helping you on the muscle front, right?

And so it is not tightening the skin. It's a little bit lumpy as well. But the EmScolp Neo is magnetic wave and some in a gentle heat source that sort of melts the fat, increases the blood flow to the muscle, builds muscle and tightens the skin.

So, you know, these technologies are just really cool. If there's one thing to take away as we wrap this thing up is that your muscle matters. We used to think muscle was important.

Now we're realizing it's like 10 times as important as we thought. Your grip strength directly correlates to your life expectancy. That's just insane.

As you're moving forward in your health journey, I don't know if you trying to lose weight. I dunno if your just trying focus on longevity. If you just want to feel better.

movement and carbohydrates and protein, or if you're really optimizing at this point with peptides and some life hacks. The questions you need to ask yourself, are you getting stronger?

Are you preserving your muscle or are just losing weight or you just taking something that makes you feel better? But in the meantime, you are handicapping your own ability to feel well and be healthy later.

If you go on one of these weight loss journeys and you lose a bunch of muscle, eventually you're going to pay the price. Then eventually you'll gain the weight back and you just be skinny fat and it's just, you will be less well off.

So I think I have beat this horse into submission. I will just say with that, that muscle is an organ. It's more than just. how you look, it's more than what you can do, although how do you and what can you do are super important and we're not going to minimize that.

I just want you to know that it is a lot more that that, so focus on body composition, not weight loss. Focus on strength, focus balance and mobility and flexibility as we age and go and then also just how you feel.

And then ultimately, all of this starts with a real plan. There's a lot of information out there. It's the information age. Just unfortunately, a of it is junk.

So we would love to partner with you if you're in our area or if your in Texas and you want sort of a virtual relationship, we're happy to do that for you.

However, really, I just love that the world is waking up to the idea that all weight loss is not equal, that muscle mass is king, you need a protein first approach to your diet.

You definitely need little resistance training mixed in with some cardio. And in the long run, let's just be healthier and feel better both now and later.

So if you have any questions and you need to reach out to us, leave us a comment, reach our contact information in the show notes and we'll talk to you guys next time.

Thanks for joining me today on My MD Unscripted. I hope today's conversation opened your mind and inspired you to imagine a better path for your health and therefore life.

If you found value in this episode, be sure to subscribe, leave a review, and share it with someone passionate about transforming healthcare. Real change starts with real conversation, so let's keep on going.

Until next time, stay well, Stay curious, And never stop pushing for better.