

Jonathan: Welcome, everyone. Jonathan Hunsaker here with Organixx. I'm joined by our good friend, Dr. Daniel Nuzum. Thanks for joining us, sir.

Dr. Nuzum: Glad to be here. Thank you.

Jonathan: Absolutely. Listen, today's video is for the men. We're talking about aging, we're talking about hormones, testosterone, all of that fun stuff.

Dr. Nuzum: Oh yes.

Jonathan: So, Doc, tell us, what's going on with this as we get older?

Dr. Nuzum: Oh, well, what we see is as gentlemen get older, their testosterone production will start to wane as they get up in age. We also see that their thyroid will wane as they get up in age. And those kind of, they typically mirror each other. We'll see that real frequently. The other thing that seems to happen is their cortisol will start to rise. They tend to have more and more cortisol as they get older.

And one of the things that happens with the high cortisol that starts to really mess with the rest of the system is that disrupts their insulin metabolism. So, as they get older, now the cortisol goes up and stays up. That suppresses their testosterone production, but it also starts to disrupt their insulin metabolism. And that feeds into becoming Type 2 diabetic, which then that disrupts the circulatory, and that has all of its own issues.

Jonathan: Everything starts going down from there.

Dr. Nuzum: Right, right.

Jonathan: So, let's talk specifically about testosterone for a minute. What is testosterone? What does it do? And what is happening to us as we get older and we are creating less and less of it?

Dr. Nuzum: Okay, so testosterone is the male hormone, it's the boy hormone, it's what makes men manly, it's what grows muscles and gives us facial hair and hair everywhere else. It's what gives us our drive and really plays a lot into our personality and all that kind of stuff. It plays a huge role in our sexual health, reproductive health, and all those types of things.

But just as big a role as it plays in like reproductive/sexual health, it has just as big a role in cardiovascular health. Think of this. Your heart's a muscle. If testosterone builds good, strong, healthy muscles, it directly affects your heart.

So, as we get older, there's a lot of things that this starts to affect. It affects us on a connective tissue level. Believe it or not, men and women are different. But we're different even in the way our connective tissue is designed. The design of our connective tissue, men have an interwoven, a tighter, stronger, more dense-built connective tissue system, and that has to be maintained by *androgens*, which is what testosterone is. It's an androgen.

So, if that connective tissue system isn't being maintained by enough testosterone, it starts to deteriorate, and we see arthritis, we see joints fall apart, we see low back problems, we see bad knees, bad hips, bad shoulders, bad you name it.

We also see the gut; the gut will expand as those things start to break down. And the gut typically won't just become a "jelly-belly," a lot of times it will be distended when that happens. And as that process is going on, connective tissue starts to deteriorate in a man's body.

There's a metabolic issue that starts to take place, and that testosterone starts being converted into estrogen also, because we end up, our fat cells start expanding as we expand. We do, we start getting—the middle starts to get a little bigger, we get expanding and stuff like that.

The fat cells become more active in converting testosterone into estrogen, which, by the way, reduces our level of testosterone. So, not only do we have, as we age, we're producing less and less, if we have this expansion issue happening in our body, a bunch of it gets converted and we end up way deficient. And not only deficient, but we get—one of the things in our system versus women, our system wasn't designed to handle much estrogen.

That actually creates a lot of problems. Estrogen is an extremely sticky hormone, very, very sticky. And so, when our estrogen starts to rise, our blood becomes "sticky," or thick, and we tend to plug our arteries up and things like that. Our joints get stiff. This is a whole bunch of things that start happening with this.

And there's another process that goes on. Gentlemen, we're the leaders of the family. That's just the design of the family. We're the patriarch, we're ultimately responsible for the family and everything. So, it's a lot of stress. It's a lot of stress. We carry a lot.

And with gentlemen, as we age and we're under that stress for a long period of time, one of the things that happens is, and this goes on alongside this whole expansion process I just talked about, so we have this expansion deal going on over here, it's a whole other thing that happens on the other side, and this is more hormonal.

As we stay chronically stressed, or under this pressure, we tend to produce more cortisol. Our cortisol levels go up, and the higher our cortisol goes, the lower our testosterone will go. This is another, just another thing that affects the whole process. And that also encourages the conversion of testosterone into estrogen.

So, we have these two things that are kind of converging in our system at the same time as we're aging. It all just kind of creates this perfect storm. And so, there's definitely—there's quite a few things we can do about it. You're not doomed by any means, but this is the process, this is what's going on.

And this is all without toxicity, heavy metals, petrochemicals in the system, glyphosate in your system, all those types of things that are hormone disruptors themselves. So, we have all these other factors that come into play, but these are two physiologic, these are things that go on in our bodies as we age. And those whole processes just get—all the other external things feed into those processes, if that makes sense.

Jonathan: Absolutely, makes a lot of sense. When does a man's testosterone in general start decreasing, and by how much? So, we likely have a lot of 40-year-old plus that are watching. I'm about to be 40 this month.

Dr. Nuzum: Alright. Happy birthday, by the way.

Jonathan: Thank you, thank you. And I know that we have an older audience. I mean how do we really start knowing that it's decreasing?

Dr. Nuzum: It's usually between 32 and 35.

Jonathan: Okay.

Dr. Nuzum: When it starts to really decline. Your adrenal output of DHEA, which is a whole other—there's a whole other hormone. It's from your adrenal glands, your stress glands. They produce a group of testosterone-like substances that only make up about 20 percent of our total testosterone. So, it's a significant portion, but it's not too much.

And DHEA and other adrenal androgen production starts to wane at about 30. That starts to start—it goes from here to here, then to here. So, that whole from here to here starts to happen at about 30, and it's usually 35-ish that production actually starts to slow down, to reduce.

It's usually not too noticeable until about 40, 45-ish. Men generally notice something at 50. That's real common. It's usually noticeable by 60. That's almost universal. And we can see that also in their lab results. We look at the labs and things, we see the same thing.

Jonathan: Well, so, and I don't mean to cut you off, but you talk about I mean testosterone is the man hormone, of course, right? And as it decreases more and more, does that affect our drive? Does that affect our energy? Does it affect all of that? I mean it's not like you necessarily are going to get older and start crying more necessarily, although maybe you do, but really, I mean what are the day-to-day effects that we're seeing?

Dr. Nuzum: Testosterone, think of this. I'll just give you one example, one example. Testosterone enhances how much oxygen your red blood cells can carry. So, if energy, if you measured energy by your oxygen saturation in your red blood cells, if it's at 100, you're feeling good. If it's a 95, you're not feeling good. And so, testosterone affects that. So, that's one thing.

It affects the blood volume, so the volume of blood that your body produces is affected by testosterone. I guess what I'm getting at is your energy, whether you feel like getting up and doing something or not is going to be definitely, definitely affected by your testosterone levels.

Jonathan: Yeah, it's interesting. I mean it's not—you're less motivated to do things doesn't mean you're lazy.

Dr. Nuzum: No.

Jonathan: It's just it could absolutely be a physical, a hormonal deficiency in your body or imbalance even, right?

Dr. Nuzum: Right.

Jonathan: Let's talk about what are some things—obviously you can do hormone replacement therapy, and there's definitely different qualities of that. We're not here to really talk about that. There's enough stuff you can go find online about that. What we're a lot more into here is how can we change our diet, how can we change

our lifestyle, supplements, things like that. What are some things that somebody could do that's experiencing—it's pretty much going to be all men at a certain age. No matter what, it's decreasing. How can we reverse that? How can we improve that? What are some things?

Dr. Nuzum: Reducing sugar intake, super important. Super, super important. High blood sugar triggers high cortisol response. And because high blood sugar is a stressor, so if you have consistently higher blood sugars, your cortisol's going to kind of raise with that.

And remember, cortisol and testosterone are antagonists. So, the more testosterone you have, the less cortisol. The more cortisol, less testosterone. So, if you want more testosterone, you've got to reduce your cortisol.

One of the metabolic triggers for high cortisol is high blood sugar. And so, reducing sugar. This is one dietary thing you can easily do. Reduce the amount of sugar you're taking in.

Number two, increase, in particular, your cruciferous vegetable intake. Broccoli, cauliflower, kale, brussels sprouts, mustard greens, your entire mustard family actually is all cruciferous vegetables. So, all of those types of vegetables slow down that conversion of testosterone into estrogen, which is extremely important. Also, these are our more hardy vegetables. Most of us aren't big fans of leafy things. "They don't fill you up." You know what I mean?

Jonathan: Sure.

Dr. Nuzum: So, you get, as a matter of fact, you take a pound of broccoli versus a pound of meat, there's more protein in the broccoli per pound. So, it's a hardy vegetable. These are things that you can actually fill yourself up on. You don't have to have the bread and all the other stuff. So, more of your cruciferous vegetables. Focus on those things.

I use iodine as another—iodine is an old remedy. It's something that's been used for hundreds of years, thousands of years. It was used topically for the longest time. When they figured out how to get it internally, they discovered that it would reboot or at least *help* reboot the hormonal system. So, it was used as a hormonal tonic in both men and women for years and years and years.

And it wasn't until maybe about the last 60 years that that all kind of slowed down. But it was a medical treatment for low hormone production. It was actually something, not just naturopathic doctors, it was a conventional treatment for low hormone production. So, iodine was something.

Now, also, the next thing to do is consume *adaptogens*. Adaptogens help increase your capacity to adapt. When you increase your body's capacity to adapt, it deals with things better. Does that make sense? I'm trying to give you a concept.

Jonathan: Yeah.

Dr. Nuzum: This is a super important concept, actually.

Jonathan: I guess my question is what is an adaptogen?

Dr. Nuzum: Right, right. So, your adaptogens are things like turmeric, and ginger, and ginseng, and ashwagandha. There's a lot of adaptogens on the market that are touted for "Viagra alternatives" and things like that, but they're adaptogens. Those are muira puama, epimedium, it's called horny goat weed, maca, those are all adaptogens that are very good for men because they help to actually reverse these processes that I'm talking about. They help tone down those processes at least.

So, that whole expansion process we talked about, they can reduce that and settle that down. The conversion of testosterone to estrogen, they can slow that down. These things help to normalize or restore normalcy within the system is what an adaptogen does.

And so, there's thousands of adaptogens, but there's some really good ones that are available on the market. That's kind of what I would lean on before ever introducing a foreign hormone into my system, you know? See if you can get your body to do what it's designed to do first.

I have a basic principle I teach to all of my patients, and that is if all you need is a pellet gun, don't use a bazooka.

Jonathan: Yeah, absolutely. And the quick fix, a lot of times, is the bazooka.

Dr. Nuzum: The bazooka.

Jonathan: Right. Or people think that that's it. "Let me just go and get this shot." "Let me just take this prescription or take this pill," or this or that. The challenge with that is it creates so many other side effects because

you're not going the—you're overdoing it.

Dr. Nuzum: Overdoing it, right. With collateral damage.

Jonathan: Absolutely, exactly.

Dr. Nuzum: There really is. And so, it's not that it's not doing what it's supposed to do, it's overkill. What better—do you want to be dependent on a shot every week, or twice a week sometimes? Or, taking some herbs?

Jonathan: Sure.

Dr. Nuzum: You can regulate taking herbs way better than you can regulate getting a shot every week.

Jonathan: And for some, I mean the shot may be what they need, right?

Dr. Nuzum: Absolutely.

Jonathan: So, we're not saying don't do that, just consider, try some other things first.

Dr. Nuzum: Right.

Jonathan: And when we say *try*, it's not take it for a week and say "Oh, I didn't feel a difference," right? Like commit to it. And more than—I think it's more than just taking an herb or a supplement, too. Do the whole life-style change for 90 days and see if you see a difference, right?

Dr. Nuzum: Absolutely.

Jonathan: I know that I felt a big difference, because I was looking into hormone replacement therapy a couple years back. And when I went and started eating more of a ketogenic style diet, where I was consuming more fats

and getting rid of the sugar, not that I tried to stay in ketosis all the time, I just eat more that way, changed a lot of things for me.

Dr. Nuzum: Huge.

Jonathan: That and then putting in too high intensity training or weightlifting. Because that's naturally going to produce more testosterone and all of that.

Dr. Nuzum: You know, it's real interesting. Weights, weightlifting in and of itself has a very—it triggers your body to produce more testosterone. So, you get in there and exert yourself, your body, as a response, remember the connective tissue I was talking about, when you stress that connective tissue, it has to be repaired.

What repairs connective tissue? Androgens. What's testosterone? Your primary androgen. So, you go in, you lift some weights, pick up something heavy, and you do that a few times, you get in there and do some weightlifting, that directly stimulates—it's your physiology, your body's naturally going to produce more testosterone in response to that exertion.

Jonathan: Yeah. Great points. I mean so listen, if you're watching at home, ladies if you're watching this, get your man some more broccoli, get him to the gym lifting some weights, some horny goat weed can help. Men, really, I mean take it seriously. Get rid of the sugar, start lifting again, even if it's just a couple times a week.

Dr. Nuzum: Right.

Jonathan: Decrease the stress. The stress is another big one, right? You're talking about the cortisone and all—cortisol, sorry.

Dr. Nuzum: Sure.

Jonathan: Cortisol increasing, and that directly affecting the testosterone levels. And that comes from stress. So, whether that's taking walks, whether that's going and sitting in a sauna, whether that's picking up meditation, even doing yoga, doing things like that, what are all of these things that you can really do *before* you head to the clinic and go for that hormone replacement therapy. There's a lot of things here that you can do and really have you just perform better, look younger, have more energy, all of that fun stuff.

So, thanks, Doc.

Dr. Nuzum: Thank you.

Jonathan: A wealth of information as always. Thank you, everybody, for watching at home. We will see you on the next video.