

Jonathan: Welcome, everyone. Jonathan Hunsaker here, with Organixx, and my good friend, Dr. Daniel Nuzum. Thanks for joining us, sir.

Dr. Nuzum: Glad to be here.

Jonathan: Today, we're doing a video about inflammation and aging, and it's a new coined term called Inflammaging, right? How inflammation is actually speeding up the aging process. And it just deserved a whole video in and of itself, for us to talk about it, because the rabbit hole can go pretty deep. So, tell us, Doc, how does inflammation really affect aging, or how does it speed up aging I should say?

Dr. Nuzum: Right. Aging is a process. It's a process of things breaking down, deteriorating, rotting. We see it—I mean you see it in nature, you see it in everyone around you. We all get older, things kind of degenerate or break down, and things “fall apart.” You know what I mean? That's the aging process, right?

The best way to hit the fast-forward button on that is to get as inflamed as possible, you know? Think of a knee. If that knee gets all inflamed and stays inflamed, what happens to it? It falls apart. The cartilage deteriorates, the bone will deteriorate. We call that osteoarthritis. But it's literally the joint components falling apart.

On a cellular level, if your cells get inflamed, they actually swell up, and when that happens the cell membrane closes off and you can't get anything into the cell. You also can't get anything out of it. What happens then? Well, the cell dies. So, that's really bad. So, the more—the faster your cellular turnover, the faster you run through all the information and the amount of copies you have in your DNA. That's not good.

So, inflammation speeds up all of that degenerative process, all that—how fast things break down, and so on and so forth.

Jonathan: And so, inflammation is necessary, right? If you sprain your ankle, you twist a knee, you hurt yourself, right?

Dr. Nuzum: Right.

Jonathan: Talk about the difference between that and chronic inflammation.

Dr. Nuzum: That's a good point. That's a really good point, because inflammation, the initial inflammatory response our body has to any type of irritation is actually very healthy. It's a self-protective mechanism. You sprain your ankle; your ankle swells up as a way to splint the ankle so that you don't reinjure it. And what happens? Your ankle gets all stiff, you can't move it. Well, that's a self-protective mechanism. It's important.

Let's say you eat some bad food, and what happens? You get all bloated. Well, the reason for that is your body's using water to dilute the toxins you just absorbed. Super important. That minimizes tissue damage.

So, this acute inflammatory response is very important. It should be short-lived. When it sets in, that's when it starts to become a problem.

So, if an injury hasn't been properly dealt with, or a toxic exposure hasn't been detoxified properly, or an infection hasn't been completely dealt with, those things will create an ongoing inflammatory response. And so, your body keeps having this inflammatory response.

There's two processes that kind of govern everything in our body. One is, let's call it a negative feedback loop, and that's kind of a check and balance mechanism. So, you eat a candy bar, your blood sugar goes up, your body produces insulin to bring the blood sugar down.

The other one is what's called a positive feedback loop. And these aren't negative and positive as in bad or good, they're—a negative feedback loop is a check and balance. So, if something goes up, something else comes up to bring it down. That kind of thing.

You have an inflammatory response, other things in your system, your white blood cells and your anti-inflammatory system should come into play and bring that inflammation down to normal. If that doesn't happen, we get into what's called a positive feedback loop. And positive feedback loops reboot as soon as they finish. As soon as the process kind of dies down, it starts up again.

When a woman is about to deliver a baby, they go into labor. That's a positive feedback loop. Every contraction, they get past that contraction and then the process starts over again, and they have another contraction, so on and so forth. And that process isn't over until it's over. That's a positive feedback loop.

Well, inflammation, when it isn't neutralized properly, will start a positive feedback loop. And the thing with it is the intensity grows every time it reboots. And so, it gets more and more intense, and it spreads.

As chronic inflammation sets into the body, then you—I mean it does everything to the body that water would do to a piece of wood. As water—as a piece of wood gets waterlogged, all its fibers expand, and you have fluid in between those fibers now. And so, the wood loses its structural integrity. It can't hold something anymore. And so, if it has pressure on it, everything sags, just like... (pats stomach).

You know? Same thing happens. As we get inflammation, stuff starts to sag in our system, right? Because our tissues are waterlogged. If that becomes the norm, that wet environment becomes a pro-inflammatory environment, so easy to produce more inflammation. It's an environment where we can have more inflammatory responses and things like that.

Also, that wet environment is a great place to grow infection. And once infection sets in, infections, I mean they like put the whole degenerative process into fast-forward. Poof! Things just go right off the edge.

Jonathan: I wonder how many people think, “Yes, I am probably chronically inflamed,” or “I’m not.” So, what are some ways to tell if you’re chronically inflamed? And what are some things that are causing that chronic inflammation? Because I think a lot of times, when people think about inflammation, they think about it, again, the swelling of the knee, the swelling of the ankle, and “Yes, it’s constantly hurting me,” or something like that. And so, are they relating all this to just that shoulder degenerating?

Dr. Nuzum: Right.

Jonathan: When it’s really a chronic inflammation of the body that’s everywhere that’s happening. So, can you talk a little bit more about that?

Dr. Nuzum: Sure, sure. The inflammatory process is something—your body doesn’t just get inflamed. Inflammation is the response our body has to being irritated. When we have too many irritants in our lives, our body’s capacity to adapt to all those irritations gets overrun. And once that breaks down, then just everything starts irritating us. All these things become factors in creating a more global or systemwide inflammatory response.

So, that’s when our immune system gets bogged down and it just stops regulating the inflammatory response, and it can just happen everywhere, all at the same time. So yeah, it was your shoulder, and maybe you had some gut issues, and your foot hurt every once in a while, and yada-yada-yada. Those have been going on for 20 years. There’s some family stress, there’s some job stress. So, you’ve got emotional things, you’ve got financial things, you’ve got external things.

And so, as those irritants accumulate and kind of converge on your system, it breaks down. And when that happens, you just start having this systemwide inflammatory responses. We call them autoimmune disorders, we call them diabetes, or heart issues. The thing is, your genetics will pretty much determine where these things will show up, but not whether or not they'll show up.

Jonathan: Say that one more time. Because I think everybody needs to understand this.

Dr. Nuzum: So, listen to what I'm saying. So, your genetics may determine where these inflammatory responses are going to affect you the most: your heart, or diabetes, or cancer, or an autoimmune disorder, or your foot, or your hair. All that is—those are, yeah, the genetics may determine where these things will show up, but it doesn't determine whether or not they will show up.

Jonathan: Let's talk about how your body responds to the stress and its response when it hurts an ankle versus the stress and the response to an emotional stressor.

Dr. Nuzum: Okay. Let's say you sprain your ankle. Well, your immune system sends fluid to brace the area, also to wash it out. When you have an injury, you have damaged tissue. So, there's "pieces of tissue" that have to get washed out of the area, so you add more fluid to it to wash that out. That all makes sense. Your immune system mobilizes, white blood cells come down, they come in to start repairing everything. All that happens, and it should heal relatively quickly.

Your kid comes home with a bad report card. You have the same inflammatory response, but there's no place, no location to send the extra fluid, the white blood cells. You see what I'm saying? So, your immune system mobilizes as if you just sprained your ankle, only it's a bad report card. So, there's no place, no specific location to send this response. Therefore, it diffuses throughout the entire body. Which is why, later on, you don't feel well, you can't sleep, your stomach is upset. You know what I'm saying?

So, you have this inflammatory response in your system, regardless of the source of the stress.

Jonathan: I think we deal with a lot of things now that we never did in the past, especially when it comes to stress. The amount of stress that we put on ourselves, like if you're not busy, you're not productive. You've always got to be working or you're lazy. Or the stress that social media brings to the whole conversation.

It's interesting. Social media only shows the best of everybody's lives. Like you're taking a picture, you're on Instagram, you've doctored it up, it looks all pretty, right? And so now, everybody that's following you on Instagram

or Facebook, they see only the best of your life, the best pictures, the doctored pictures, all of that. And now they're comparing that to themselves, and now they start feeling less adequate. Now you start feeling stressed.

And I mean so from stresses of technology to the stress of work to the stress of finances to the stress of family life, I mean no wonder, right, that you're chronically inflamed. Not to mention the poor food choices that you may have, not to mention the overconsumption of sugar, not to mention the lack of exercise and detoxification, and all of these things that you need to have to kind of balance out the inflammation.

It's no wonder we feel 10-15-20 years older, it's no wonder we look 10-15-20 years older than we really "should."

Dr. Nuzum: Right. You can fast-forward the process by creating more inflammation and dealing with more inflammatory issues. Or you can slow down that process and maybe even reverse it. But if you're fueling the fire, it's going to burn hot.

Jonathan: There's things you can do to detox and clean out your body, right?

Dr. Nuzum: Right.

Jonathan: You can change your diet, you can do stuff. And you mention in another video, that I thought was really important, is you can—there's that end date anyway, right?

Dr. Nuzum: Right.

Jonathan: But you can improve what it's like now until that date, right? Or you can speed it up and you can suffer even more, and possibly move that end date up sooner.

Dr. Nuzum: It's kind of like if you never exercise, and you start going to the gym. Well, if you're a fellow and you want to be like Arnold Schwarzenegger when he was younger, it ain't gonna happen right away. It's going to take some time.

The Titanic could have missed that iceberg had they started turning earlier.

Jonathan: Sure.

Dr. Nuzum: You know what I'm saying? Depending on what you're doing, you can create more suffering for yourself and cause things to get worse and worse and worse by the choices that you make, or you can improve things.

If you want to refurbish an old house, you don't use rotten wood. You don't use rusty nails. You don't—you know what I mean? You've got to take things, all the rotten things out of the house, and you have to bring in fresh, new wood, and new nails, new floor, new paint, and new drywall, all those different things. You've got to bring in new stuff and you've got to replace the old with the new. And if you replace with new high-quality "stuff," the living space is better.

Same with this living space. It's really the same process.

Jonathan: Well, now that 100-year-old home now looks like its new, right?

Dr. Nuzum: New, exactly.

Jonathan: Likely still has the character of an old home, but it looks and feels—

Dr. Nuzum: It looks new.

Jonathan: —new.

Dr. Nuzum: Correct.

Jonathan: And younger. Awesome, Doc. Thank you so much. I think we could talk for a long time about this. And we are, we're going to shoot some more videos for you about aging, what are some of the things that you can do to really help slow it down, reverse it, and just have a better understanding so you can live a better and happier life.

Thanks for watching, and we'll see you on the next video.
