Introduction: The Biggest Health Lever for 2026

Welcome to the health fix podcast where health junkies get their weekly fix of tips tools and techniques to have limitless energy sharp minds and fit physiques for life Hey help junkie's on this episode the help fix podcasts I'm doing another solo podcast so you get me dr.

Janine Krauss and on This episode I want to talk about the most I would say impactful thing you can do for your health in 2026 and beyond. What is that?

Stay tuned. I'm going to tell you. So let's get into the podcast. One of the biggest complaints I hear from folks is fatigue. And it stems from brain fatigue, but also can be decision fatigue.

It can just be general fatigue it could be fatigue after eating, it can fatigue early during a workout. I mean, I could come up with many fatigue statements.

And it often comes with a foggy brain. It often come with I'm feeling stiff in the morning. I takes me a while to kind of warm up. Also hearing about things like, you know, I just don't feel like myself.

And right now, it seems like maybe the solution is supplement with hormones. Like let's get on some bioidentical hormones and change things. But I tend to be the one who sees folks who don't do so well in hormones.

And, you know, there's not that magical response. For many women, and men too, the biggest thing that we're overlooking that's kind of the big factor in all of aging and we are jumping right for the fancy stuff, like the hormones, is the inflammation.

Sure, I'm sure you've heard inflammation a hundred times over like inflammation, inflammation. It's, it's everywhere. But I think what a lot of people don't realize is.

Inflammation affects every single part of your body, but in particular it affects the brain. it alters perception of reality, It messes with your memory and your focus and it can create a huge issue with.

Your mood. When you don't feel good in your brain, you're not going to be the best version of yourself. 100% of the time, that's a problem.

Why Inflammation Drives Fatigue and Brain Fog

And if we look at neurodegenerative, so conditions that degrade the nervous system, a lot of times it's looking at like dementia, it is looking Parkinson's, Alzheimer's.

Well, what's the root of that? Inflammation. What's the root of gaining weight? Inflammation. You know, we could tie all this back to the body trying to do a good thing to heal us and it overloads on it.

And at the end of the day, inflammation is what makes us feel old. So what is exactly happening with this concept of feeling old? What is going on? So your cells aren't repairing like they could, like the did back in the 20s, teens.

when you were a little kid. And your mitochondria, so those are your factories in every single cell, are not producing enough energy. So that will throw off hormones.

What also is gonna happen is, especially when we try to adjust things, you know, we cut calories, work out harder, or we start trying to do some fasting and things of that nature, We might actually end up depleting some of the nutrients we need to our brain.

Because your brain takes up 20% of your calories you eat a day. It's a highly, highly needy organ. And what happens, and this is something that I see so commonly and it happened to me too.

This is why I feel like now's the time to kinda talk about this because my podcast previously, episode 591, I talked about kinda what I learned in 2025 about health in general and my health.

What I'm really kinda putting the pieces together on right now is like, Inflammation causes you to have certain behaviors. Like I never was a sweet eater before.

And I hear this from a lot of women, like, you know, I've never really liked sweets or it's the opposite. I'd never like salty things and now I'm going after chips and I can't stop myself.

and i have this like overarching urge to just eat these things, and keep running back over and over again through the kitchen. It's like that's not even me.

This is where I am going, ah! Yes, when estrogen declines, we will crave more carbs and the body is driven to store more fat because that's where we can store hormones when our ovaries aren't making them anymore.

But what if there's another thing happening here? What if part of this is the inflammation tied up in it? You know, a lot of people are like, I feel puffy, foggy, exhausted, and they go through all the labs and nothing comes up and this is aging.

Well, it is, but it's because of inflammation. Inflammation isn't really the enemy. I want to make sure we know that. Like, it's a great signal. It's something we need to start paying attention to.

Where do I feel inflamed? Where I do feel puffy? Am I brain foggy? am I achy? When? when am i tired? Taking note of every single thing that exhausts you, including people and situations.

This will give you a ton of information about what's going on inflammatory wise in your body. And so, Yes, inflammation is your body trying to protect you and acute inflammation will heal.

Like if you trip and fall and you twist your ankle, yeah, it's going to swell up. Yeah, that needs to happen, but it shouldn't keep staying swollen for life, which I see for a lot of people that inflammation and that ankle never goes away.

And now we end up with stiff ankles that are puffy and, and for lack of a better term, look like cankles because they don't have the shape they used to.

We don' want that. I don''t want. And so the more inflamed that your body is, the it's going to drain your energy, especially if it gets to the brain.

And this is one of the things I'm starting to realize when we talk about, you know, trauma in the body and trauma and the nervous system and why people wouldn't lose weight.

It's inflammation, but why? Trauma causes inflammation. Cortisol causes inflammation. All the things that we're describing here, I think a lot of people will talk about trauma being stuck in the body, which yes, that can happen, but why?

What's happening there? It's keeping the inflammation process going. Your body's on surveillance. It thinks it needs to keep healing something. And all of this, of course, accelerates aging.

it blocks results, it block supplements, It blocks herbs, it blocks peptides, It blocks hormones from giving you good results. So going back to the brain, it's often the most common but also misunderstood area of inflammation, fatigue, and brain fog.

I kind of think brainfog is a toxic brain from inflammation inflammatory markers. And, you know, How's it happening? Well, what happens is we have these things called cytokines.

They're like messengers in the body that come from your white blood cells that say like, there's a problem, bring in troops, let's fight it. And these travel through the bloodstream to go wherever they need to, and they can cross your blood-brain barrier.

It can also, they also over time make it more leaky. So maybe you've heard of lekey gut. as a way that things get across from the gut into your bloodstream?

Leaky brain, another concept. There. And usually most people who have a leaky gut have leak brain. My dad likes to joke that his brain's leakey just in general.

That's why he forgets things. Well, yes. But also, he's 89. How much inflammation's in there? He likes a drink. how much inflammations in their? Love sweets.

Something to think about. So those cytokines, those chemical messengers from our white blood cells, will take the messages and they'll go right inside your brain into something called microglia, which are little cells in your brains.

They're immune cells. And they're gonna trigger them to go on defense. That's a defensive state the brain gets into. It's not a high performing state.

Think of it this way.

How Brain Inflammation Affects Mood, Focus, and Aging

Whenever you're feeling defensive, like someone's, you know, criticized you and you are on defense, You go to a low vibe energy, right? You feel down about yourself and that doesn't help us to heal.

And trauma kind of puts us in a little vibe state, where I'm thinking of all the things that can affect how we specifically perform in the brain. And if the brain's not working right, let's put it this way, if we take it to another level, a lot of folks are talking about rewiring the brand, I've mentioned it, and changing your thoughts and your processes and going from being negative to being positive and things of that nature.

Why is it so hard to change how we think? Why it is hard for some people compared to others? I have to think that it boils down to a certain level of inflammation.

The more inflamed you are, the more in flame triggers you have, and the clear thoughts don't come. I've noticed in myself, and maybe you've notice as well, if you had a day where you didn't eat that great the day before, maybe it was a holiday.

The day after, you don't feel so great. And usually when you feel don' t feel great, don t make great decisions. I had a period of time where I would snap pretty quickly on folks that would, you know, pressure me to do certain things, hurry up with certain.

And when I look at it, I'm going, well, it was like in the peak of being stressed. and for me back that time, It was skipping meals and then eating a bunch at dinner time because that was the time I could get food in.

Well, if you're not eating all day and your blood sugar is dropping and you already have an inflamed brain, Might not be a good idea. Folks tout fasting, and I've touted it too.

I think it is beneficial. But when we're consistently doing it and under-fueling ourselves, now this could be problem. Now, let's go back to the brain and the…

brain processing. When we get the microglia all excited, like all of those little immune cells in the brain get super

excited. They're going to slow down the processing of the Brain.

And they're gonna be like telling the Brains, something's going on, we gotta fight it, well that slows down your thinking process. You have trouble focusing, you have troubles finding words.

and your mental ability to like crunch numbers or think through complex problems drops off. And this is because your brain tries to conserve energy for survival.

Not clarity, not creativity, all those things and I'll hear this from so many folks that I've lost my creativity. I can't come up with anything creative.

Can't think of new thoughts. You know, be a thought leader. might be because your brains in fight or flight mode. And as I mentioned before, your brain uses about 20% of your caloric intake.

That's wild. But it also shows you if you are in fighter flight and your bra needs to be on point to help you in survival. Of course, the like extraneous activities like being creative, coming up with new ideas, all that stuff is not going to happen.

So I hear the common term of like I have ADD, I've ADHD. And yes, these are valid conditions. But how much of it is also related to brain inflammation and how could we improve ADDD, ADHD and maybe not rely as much on meds if we can get the inflammation down in the body?

Something to think about. I'm gonna talk about some ways, of course, a little bit later in the podcast. Now, if inflammation reduces your brain energy, so the body uses something called ATP, A-T-P, adenosine triphosphate.

That's our like currency in our body for energy. And if the bodies needing to make extra ATP, we turn on the mitochondria, the factories in all of our cells, minus, of course, our red blood cells.

They don't have mitochondrion. So if the body's trying to get more brain energy, it's going to try to upregulate ATP in the brain. If we're inflamed, can't do that.

And so we'll get worn out with simple tasks. Multitasking just doesn't happen. Decision fatigue, so decision making doesn' happen, and literally it's like your brain's running low on fuel.

And this is why often after meals, like you fuel yourself up and then you're just like, oh, cog down after the meal, because your body's, what do I do with all this?

I'm already inflamed, I can't use the energy. I see this commonly in folks with Parkinson's. And so this is something we need to be thinking about. The other big thing is stress and little stressors throw us way over the edge.

We can be more fearful than we ever were, we can more anxious. And I hear this a lot from a lotta women. Yes, progesterone plays into this because proesterones kind of our calm sister hormone.

For guys, this relevant to you too. Progesteron guys have projesteron, you guys can calm with it too, some guys that have microdoses of projesterone to help them.

But here's the crazy thing, like we will right go to, if I don't handle a stressful situation, well, I need to work on regulating my nervous system. Yes, that takes time.

And we can do it, but also we'll think about, oh, need rewire how I think of that. Yep, also takes. but can be super simple if you work on your beliefs.

But here's the thing, how can you get positive beliefs? How can change your fearful thoughts if your stuck in brain inflammation mode? It's tough. At one point, not too long ago, I found myself starting to think about worst case scenario while driving.

Like what if I flip my car right now? I'm like driving and there's no one on the road. It's so weird, right? Like if you ever driven in Northern Wisconsin, your biggest issue is turkeys and deer.

That's it. Um, maybe a fox or something, but really turkies and dear, I don't have traffic issues. But my brain was like thinking about crazy things. And so it shows you how much inflammation can have you in that negative thought loop, thinking weird stuff that would like never happen, like worst case scenario stuff.

If you're already a worrier, things can get worse. things to be thinking about. Totally pun intended here. Now, what complicates this is also blood sugar issues.

And of course, most people now have connected that inflammation equals dysregulated blood-sugar and too much sugar and to many carbs and this and that and other.

But what I think we're not really thinking as a whole is that if we don't address insulin resistance, which is very common over 35 in men and women, then we're not gonna get much results on other things.

And I've learned this the hard way with hormones. I have tried to give hormones and we are slowly working on insulin resistance, but nothing moves. Same thing goes if you give a peptide like a GLP-1, trisapatite or semaglutide.

They're meant to work on Insulin resistance. But if someone's so dysregulated and so inflamed, you may see some issues. So we need the vitamin C there.

We need some foundations there, And we need to be looking at the whole picture of inflammation. Because one of the things I've seen by using terzepatide in patients, a lot of them are like, my brain is back.

I can think clearly again. This is amazing.

Blood Sugar, Insulin Resistance, and Neurotransmitters

And yeah, because it's working on that inflammation, but for the folks that aren't getting the faster results and the brain results like that with the GLP-1s, what we're looking is like okay, we've got other areas that are coming in that're causing inflammation GLP-1s are effective, but you can't get results with them if you're eating junk food, if your not sleeping enough.

If you have so much coming at you in terms of stress that you haven't dealt with, that's a problem. And especially if there's alot of overload to your brain.

One of the biggest factors when there is insulin resistance is neurotransmitter balance. It's highly disrupted. When that neurotransmitters balance is off, now you are going to have some serious issues of how you think.

Most of the time it's looking for dopamine hits, like, more sugar, hit that button, that's a problem. And your brain works off of glucose, so you need some sugar.

You need it to happen. But when you have insulin resistance, you're not getting the sugar to the brain. It's hanging out and getting stored as fat. And this is where we get a lot of that, like, anxiety and brain fog kind of component.

A lot where the difficulty concentrating comes in. And, this where, we've got to think about, okay, how do we help these neurotransmitters? Because dopamine is going to impact focus and motivation.

Acetylcholine is gonna affect your memory and how you learn. Serotonin is effect mood and mental stability. especially gonna help you to not head towards the depressed side of things.

Now, all three of those are affected when the brain's inflamed. Like I mentioned before, leaky brain can happen when the gut gets leaked, but we can also end up with leaking brain.

The more the blood triggers off for longer, the more of the body's chronically inflamed. But also if we've got mold toxins, some mycotoxins, we got Lyme disease coming in.

We have a brain injury that happens. Or someone who's had a history of a injury is more prone to leakey brain, brain inflammation. We're also looking at toxic food, toxic air, and toxic water.

And in future podcasts, I probably will talk more about water because I'm finding that even if we do our best to filter with say we have a Berkey, say, we've RO, so reverse osmosis, there can still be some issues going on that we're not able to tackle when it comes to the water.

And part of it is what minerals are in the Water because reverse Osmos is going to pull a lot out. You got to put things back in. But then also, if you're looking at just using our fridge filter is not enough.

It is NOT enough for what's in tap water these days. So we've got a lot to think about when it comes to water. So stay tuned for those podcasts in the new year.

Now, the other big thing is like when we sit in fight or flight mode, The brain's on, right? It's trying to figure things out. It is trying find a solution for us and we're stuck in sympathetic state.

Oddly enough, we want more glucose and fuel to the brain, but we divert blood away from it, which we not have more blood. We also divert the blood away from the gut.

And so digestion and detox suffer. So the more stressed we are, the worse digestion gets, more chance for leaky gut, and more for the leak brain. I'm sure I've probably kind of beat a dead horse at this point now in terms of all of the things that contribute to inflammation.

So how do we tackle this factor? We do have to look at food. Everything that you drink or eat, anything that goes in your mouth up to mints and gum, all of that stuff.

We gotta look how that impacts us. The food market in the US still has the ability to have an error of 20% on its labels. That's scary. So choose food that doesn't need a label.

That's my answer to that. Same thing goes down the lines of what's going on with your drinks. You know, if you're still drinking soda at this point and you not, I just don't know what to say.

Like, yes, there's cleaner soda brands and things like that nature, but the sugar hits pretty high. Kombuchas, you know there are some that are better than others.

It's so important to look at what you're drinking. And especially if you are getting the zero calorie ones, because sucralose and a lot of the other fake sugars out there are not doing you any favors.

Stevia has a synthetic side to it that isn't so great for a lotta people. Monk fruit, you wanna make sure it's actually monk fruit. I mean, there's some big factors you want to be thinking about here.

when you look at what you're drinking. The other side of this, like I said, is air and water. I already talked about water, air quality in your home is important.

And it boils down to, if you have carpets, you wanna be cleaning those, deep cleaning them well. If you've rugs, getting them out, taking care of them, the lower the load of histamine producing all the dust mites and all that stuff that's on these, that the more amount of the histamines that produced by those in you body, because histamine is the neurochemical that triggers an inflammatory response.

So lowering histamines load is incredibly important. Checking all of your pipes, checking under your sinks, this is a great time to do that. It's a New Year's check.

Look behind, you know, wherever you have piping and plumbing in the house, look behind your toilet. Double check that nothing is leaking. Get up in that attic, get somebody in their crawl space.

If you can't do it yourself, so important to know if you are getting exposed to things in your home. Because these are the chronic low-level inflammation producers that cause us to age fast and keep the inflammatory train going, and you can do all the things you want to right.

And if your homes toxic, well, you got a problem. Changing your air filters. They say to change them, I think, quarterly.

Environmental Triggers: Food, Water, Air, and Histamine

Depending on where you live, I would be looking at monthly, especially if you lived in a very urban area. City. Now the other big thing we need to be look at, and I've already mentioned stabilizing your blood sugar.

Blood sugar stabilization is so important these days because I think we are designed as a society to just inflame like that and probably because we have toxins in our environment we can't control and you know maybe we're eating foods that we don't get along with which is another reason why in the beginning of the year I always like to do a little bit of a metabolic reset where I take out the inflammatory foods you want to know what the flammatory foods are sugar wheat soy dairy And sugar, wheat, soy, dairy, we're doing real good today.

See, maybe I got a little brain inflammation I need to work on. But also with the sugar wheat soy dairy components that really cause trouble, sometimes folks have issues with high histamine foods.

Sometimes folks will have trouble with citrus fruits. How do we know what we have trouble with? We take out the things we eat the most, like eggs, high histamine, take that out, bring it back in after a month, see if you get a reaction, See if your brain gets a little foggy, if get tired after eating that food.

Introduce a new food every 72 hours. It's called the inflammation, the elimination diet. Now, The other big thing is improving your circulation and oxygen delivery too.

I talk about this a lot with Chinese medicine because it's kind of like the foundation of everything in Chinese Medicine. If there's not circulation, there is not good circulation of Qi energy, which is ATP in nutrients, and then the circulation in blood, just blood in general, the vessel to get everything there, we get problems.

And I'm noticing a lot more people are struggling with oxygen delivery to their tissues. I will see they're not anemic, but they have red blood cells that are heavily packed with hemoglobin to carry extra oxygen.

Then I look at their carbon dioxide levels and they are low. Anything under a 25 on a CO2 level in your blood, this is your comprehensive metabolic panel, that means You're not breathing well.

You are not getting a long enough exhale to build up carbon dioxide so that you can effectively release oxygen to your tissues. This is a problem. So could your breathing be creating some inflammation in your body?

Absolutely. It's contributing. That's not the forefront of it. I would say for a lot of people, it's blood sugar. And this is why everyone says protein, protein protein.

But I think protein is relative to your size, what you can tolerate, and what can you digest. Because if I learned anything this year in my own self, I was trying to get my ideal body weight in protein which is 130 grams.

But I felt like crap doing it. And I tried enzymes, and that's usually my go-to with my patients, like, let's use some enzymes. Here we do. Didn't work.

Dropped it down around the 100, 110 level, felt better. So we gotta be thinking about these things. Like, I could give someone a general ballpark, but we've gotta see what really works.

Too many, too much of anything isn't a good thing, right? The old adage of moderation, everything in moderation. So when we're looking at improving circulation, I'm going to talk a little bit about that as to how we can judge if circulation is a factor for you.

And I would venture to say that most people have some circulatory issues right now. If your hands and feet are cold, you have circulator issues. if you've had a blood clot, You have circulation issues If you build up with fluid, if your been sitting on a plane for too long and your ankles get really swollen, You have circulation issues.

If at the end of the day you have sock lines, you circulation issue. Related to lymph more than it is blood flow, but lymph and circulation are synonymous.

Just the other day I was talking with a fellow who has a 15 inch long clot in his leg. Didn't have a vaccine. Was spiked. Likely. But here we have 15-inch clot in his leg.

He got COVID pretty bad when it first came around in 2019, 2020, in that timeframe, that winter. And ended up, the clot started then. he was taking testosterone replacement therapy at the time.

It was on a really high dose of it. Probably what also slowed down blood flow. Something we need to think about, hormones do slow down, bloodflow to an extent.

That's why they say birth control can cause blood clots. Too much of hormones can cause thick blood. We gotta watch this. A lot of clinics are overdosing their people with hormones just to try to get them to feel better.

They have good intentions, they're just overdosed. And I learned that the hard way a long time ago. So I microdose on hormones. But we have to be thinking about how inflamed is someone before we give them hormones?

Because we know that the COVID, whether it's vaccine, or whether its the virus, we now it causes increased clotting in folks. We know it cause increased inflammation in the arterial and the vein systems, so our circulatory systems.

So we gotta be paying attention, like we got to be thinking about this, moving forward, that we're in a different realm. when it comes to how inflammation affects your circulation.

And at the end of the day, when I look at Chinese medicine, it makes so much sense when they're talking about individual organs. Liver cheese stagnation, liver blood deficiency.

What do those mean? Energy not moving through the liver well, well liver can't detox. Blood deficiency, not enough blood going through liver. thick blood.

Blood deficiency is thick-blood to an area. You can have blood deficiency in multiple areas, not just the liver. you can also have issues with chi and blood stagnation in the Chinese world.

Regardless of how you feel about China, the point is Asian medicine makes a freaking lot of sense. And on a simple, you know, term, it's like energy not getting there, And blood, not kidding there.

What happens to an organ if it doesn't get blood? It dies. what happens if you sit on your leg for too long and you try to stand up? Feels kind of dead, doesn' it?

Imagine that happening to certain organs of yours. So, nevertheless, the idea here is to improve the blood flow. We've got to do that as part of our inflammatory or anti-inflammatory process.

we also really do have to start looking at the nervous systems. And yes, I mentioned trauma, but also just in general, show me a person that doesn't have a little bit of trauma of some sort.

Show me someone that does have little of negative beliefs that they've brought up in their life of how they feel

about themselves, the world, situations.

The whole idea is life happening to you or for you. Likely you've heard that by now. But the point is, is you were programmed from a young age to think a certain way and then you add some media on top of that that is based on fear and guess what happens?

Total fear. Then you get an inflamed brain? Nightmare. We don't want that for anyone. I don' want for that anyone and that's why I'm wanting to talk about this.

Testing Inflammation, Oxidative Stress, and Gut Health

I already mentioned the mitochondria, I mentioned how that impacts because a lot of folks are talking like, creatine, we need creatines to help us with our muscle mass and helps with the brain and this and that.

Yeah, but there are other things that can help the Mitochondria even better. We have a legal peptide, so there's research peptides which are not considered legal and there is legal Peptides.

SS31 is a great peptid to consider to have with your Midochandria. It's not as like quick acting as something called MotC. Mot C is not legal. That one's a research peptide.

I like Mot-C better because people actually notice the result and then can see the value in taking it versus SS31 is a little slower, but the kicker with SS 31, you can the results on labs.

And this is where I am a stickler about looking at measuring your inflammation in your body. I run a lot of labs on folks when it comes to a once-over screen.

And in particular, I started to do some different ones in the last year plus since seeing what's happened with the virus, the COVID, and its clotting capabilities.

I'd like to look at cytokines, so interleukin 6, IL-6, tumor necrosis factor alpha, TNF alpha. So it looks like T and F and then a little A. And then interlucin 18. Interleucine 1B, that's a big deal.

These three are major ones to help us to really see what is going on in the body. when it comes to the signaling, because cytokines are signalers from your immune system telling your system it needs to act.

And when those are high in the body, that means we've got a highly inflamed body in a high inflame immune systems. In the immune and the nervous system will play back and forth.

I see this a lot in my folks who have had high aces, so adverse childhood events. it goes back and forth, because you'll end up with a hyper-regulated immune system, and then there'll be something that taxes the nervous system.

or there'll be something that taxes the immune system like they get a bug, you know, cold or flu, then the nervous system goes on hyper alert and we see the cyclical pattern of high inflammation and then it drops and high information and it then drops.

I'm starting to start to be able to really track this in folks, especially since I've seen them for 10 plus years in my Tacoma practice. So these are some of the things you want to looking at.

Do I have patterns of I get sick and then either my nervous system pops off or my immune system keeps me sick for longer? We can look at metabolic stress quite easily.

Fasting insulin is a great marker. Hemoglobin A1C. There's something called the HOMAIR. What that really is is an insulin resistance marker that you can tag on to a NMR test, which is your particle testing for your cholesterol.

And I like doing that one. You could do it independently too, but really, if you're gonna test insulin resistance, you

could just get a fasting insulin.

I add the HOMA, IR if I'm gonna be doing lipids, like all the cholesterol. And along those lines, If you look at your ratio from triglycerides to HDLs, so you can see too if there's a lot of metabolic stress.

Continuous glucose monitors can also help quite a bit in this case. Now there's a ton of debate on what's the best one out there. The one you'll use is what I'm going to say because it's going give you consistent data over the course of time.

the first two days and the last two day is not so great. So even though there are 14 days that they're on your body, really 10 days are the ones you want to be paying attention to because the 1st 2 it often shows that you're either like really high or really low.

And then It starts to peter out a little by the last two days of use. I tend to have people use them for about a month and take about 20 days out of that month in terms of the information and eat all your favorite foods and see what happens.

Put yourself into your stressful situations, see happens it's eye-opening. It's really eye opening to use a continuous glucose monitor so CGM is short for that and there's a ton of different options out there.

You could ask your doc to order one for you, the different freestyle Libre ones, and then there's also like Stello and other ones out there. Now, another factor that was a big clue for me when I started to realize I was getting a lot more inflammation the older I got was something called 8-OH-DG, which is 8 hydroxy.

Yeah, see I still have some inflammation I need to work on. But 8-OH-DG is a good marker to look at inflammation in the body because it's going to give you the level of oxidative stress you have going on Another good mark of oxidation stress is the oxidized LDLs.

You can run that with a cholesterol panel. and like LabCorp Quest or something. The 80HDG, I get that one through the NutriEval from Genova Diagnostics.

So that is a great one. Can give you a lot of insight as to what's going on. the lower glutathione you have in your body, the more oxidative stress you as well.

A micronutrient test can tell you how much glutathione you have in the body. It can also tell about the precursors, vitamin C, Vitamin E, and then alpha-lipoic, which keeps it recycling through the system.

I like that almost as a better tool than just straight 8-OH-DG. So those will be some of the looks in terms of what's going on oxidative-wise. And what is oxidated damage anyway?

It's free radicals. So it's like, I call it cell poop from the body making ATP, so it is energy, in the mitochondria will end up with a lot of reactive oxygen species and those are oxidate damage.

Folks who over exercise, folks who are pushing themselves to the limits with work will also see this happen. You'll tend to want to make sure, if you're gonna do a micronutrient test, that you at least wait 48 hours between your last heavy, heavy workout and get the blood drawn, because it can be a little misleading.

You can also have abnormal liver enzymes too, If you don't wait that time frame. Which leads me into inflammation in the liver. liver enzymes will go up, especially the more fatty the liver is, the enzymes would go out.

And conventional medicine is not going to catch a fatty liver until the livers enzymes are actually abnormal. So there's something called the hepatic steatosis index that you can Google and you put in your numbers there from your labs.

You'll need your A1c, so your hemoglobin A 1c for your blood sugar, and your AST and your ALT liver enzymes to

be able to determine what's going on there.

So that's a fun one. You also need your BMI, so height to body weight calculation for those. And when I say A1C, the part of it for the hepatic steatosis index is they're looking to see, are you diabetic?

Are you not in that range? Because they'll ask you a yes or no question. But the hepatitis steotosis is very interesting and predictive of if you have fatty liver.

The best part about this is I've seen tons of people this year who have used a GLP-1 microdosed and working with vitamin C and just overall inflammation reduction in their lifestyle and their habits in food and diet.

And liver enzymes have come down, which means their liver is becoming less fatty. That is huge. That is incredibly huge for reducing inflammation in the body.

Now, because the liver and the gut are connected, we got to talk about gut leaky stuff. So gut integrity, intestinal permeability, if you want to take about it the fancy term.

Zonulin is a common marker for just looking at leak gut. One of the markers you could get, it's an add-on to some of specialty tests. I tend to like to look at calprotectin, which is an inflammation of gut lining.

Lactoferrin is another one. You can order those through a stool test with LabCorp. It could also do it through Quest, but you can do something called the GI map, and that'll show those.

Genova Diagnostics also has great testing where you see that as well. Now, there are some interesting ways to look at the nervous system in the brain and assess for their inflammation.

Now I'll be straight up honest, I don't use these tests very often. Usually I'm going to run these if someone has a neurodegenerative condition like Parkinson's or Alzheimer's and they've come to see me, or I am going use them for someone who's just had a brain injury.

There's something called the S100B protein. And that's kind of a generic marker, but it looks for liver, brain, and kidney injury. And it will also show any inflammatory processes and infectious processes going on.

So it's generic, so you don't really know where exactly it is coming from, if it the liver or the brain or kidneys. But based on your symptoms, you can kind figure what might be going down.

Nervous System Stress, HRV, and Circulation Markers

Now there's something called the GFAP, glial fibrillary acidic protein, and this is a blood-based marker and it shows the early detection of neurodegenerative conditions and neurological injuries.

So you can see if there has been some damage with someone there. The other one there that we have now for looking if someone has an Alzheimer's risk is something called PTAU, P-T-A-U, and that's via LabCorp.

And we can do that one as well if you're thinking that your nervous system inflammation is now going to another level. Or if have a family member that has it, you want to, or let's put it this way, they've not been fully diagnosed, but you suspect that that is a good way to kind of see and then to look with the rest of the family members to assess.

Now, the other, probably my most favorite one to look at for nervous system overload and like, how are you doing with tolerating life in general, is the heart rate variability.

I love heart-rate variability, I've looked at this for years and years in different methods, but at the end of the day, if your heart weight variability is going down, it's dipping, its staying down instead of like slowly going up, in response to your cardiovascular workouts, you've got a problem.

Your nervous system's tanking. And could it be overtraining? Sure. But could be looking at lifestyle factors? It's going to be a clue something's off.

It is also a great marker to use to see if things are improving. These are like watches that you can use, the aura ring, those kind of things will look at HRV.

Now, if we're looking directly in the blood to assess how inflamed are we in vessels, fibrinogen is a great marker in blood, high-sensitivity C-reactive protein, too.

ESR, which is your sed rate, can tell us how stegase is in your blood. Homocysteine is the marker for the liver that tells us about circulation as well.

And then there's something called ADMA that's also used. I don't use that one as commonly, but wanted to mention it just that it's out there. Now, the other biggie for looking at nervous system and circulation is resting heart rate.

You could check your resting hear rate and see if it goes up and watch it overnight. If it does up consistently over time or it's like it used to be in the 50s but now it is in 60s and now in 80s, you're experiencing neuroinflammation.

And that one we can see just from Fitbits. We can look at, if you have a garment, a whoop, any of those, we'll tell you that. Even your Apple Watch. So you can imagine that these tests, not all of them are commonly ordered by a primary care provider or a specialist even.

And so a lot of times you could just be told, everything looks normal, you're fine. But this is why we need to dive in and we have to start asking questions.

You have ask, did you have any of those labs run? And by the way, I will have a PDF available with a summary of everything I've talked about. today. So if you're like, I'm driving, and I can't take these notes to know what tests I need to look at, don't worry.

I got you. And there'll be a link in the podcast notes at drjkraussnd.com. All right, so your nervous system is probably one of the main areas of inflammation.

If you've dialed in your sugar, you eating clean, you're working out, you live basically a non-toxic lifestyle in terms of what you can control. And I'll be honest, most people come to me and they're like, doc, I'm doing all the things.

I am like okay, let's see, we check it off and I like yeah, they kind of are doing the all things, but cortisol is kind fueling it. When you are going through perimenopause, or you into menopausal, your gonna have some metabolic dysfunction because cortisol, is gonna be wonky.

Then you throw in life and now we got some more wonki. This is where, when I started looking at this and I really thought about it for a minute, this is why I decided, you know what, I do think microdosing GLP-1s is useful.

And that's why decided to do it myself too. Yes, because I wanted people to get a win with their weight, but I also was like, we have too much data and it's just too good.

It's too not to say no to it. But I don't think the high dose levels are helping anyone. I max out at 5mg and I'll push it on some people just to try to get a little bit more weight loss, but I want it to drop back down and back below the 2.5. 1.25, even half of that, may be a sweet spot for some folks.

But we don't want to be going up and staying at the 12.50, which is the max amount of terzepatide for example. Now what about GLP-3s? I think they can be incredibly helpful too.

I just haven't gone there with as many people, so I don't have as much data for you. On the handful of people in my practice that have used them, it works the same as tris-apatide.

So, I think they both are beneficial. I do not tout semaglutide because I dont think it has the brain inflammation capability that the other two do. Just a little thought there.

Now, how else am I helping the Well, for a lot of folks, I'm looking at, okay, if we microdose a little bit of, let's say, terse appetite, but we don't want to get a huge weight loss or we want a mess with appetite too much.

Or say someone has a really slow gut and they're terrified to use a GOP1. Awesome. Let's use KPV. KPVE has been around for long time. And while it is one of the ones that is a little iffy to be able to use right now, if you can get a hold of it, it's amazing.

It's part of The Chloe Kale OW combination with the BPC 157 and TB 500. That's a blend that helps with muscles, tendons, ligaments, skin, hair, all the things.

What really helps with hair more than anything is the copper GHK in terms of that peptide capability. But what CLO is, is a combination of the ones for the tendons and ligaments, the BPC and the TB 500, copper, GHQ, and KPV.

I love that combination. I don't know how long it's gonna be available for now. So what I'm gonna say is if you're noticing that you are inflamed but you don' necessarily feel like you want to do a terzapatide or a retratatide, then try KPV.

It can be used with injection. There's also nasal sprays of it. Certain companies have it And as we're figuring out the lay of the land in 2026 with peptides, I'll keep you updated on where to find these sort of things.

Now, here's the other kicker. If you're like, mmm, can't find any of this. I don't want to use a research peptide site. You're in luck. A fella named Royal Lee back in the 1930s.

So he started his companies like 1929. But in 1930, he's started developing things called PMGs, protomorphogens. What they are are peptides. They're a little bit more expanded than the average peptide because he's using animal parts.

So it's really popular right now to get liver, right? An animal liver. Take a cow liver supplement. Well, he created this whole sequencing where he extracts the protomorphism.

These are specific peptids from, say, the pituitary gland, from say the adrenal gland or even from the brain. Now you may be thinking, oh my gosh, mad cow disease is going to be a problem.

They test for that. So if we're ending up where we don't have the access to certain peptides and we want to help with brain inflammation, looking at what's offered by the company standard process throughout Wisconsin, Palmyra, Wisconsin have been to their facility.

Amazing. They're on point. Trust the Company. Their good stuff. Now here's the interesting thing, they have pituitary. So pitutary is your main signaler coming down to your body.

They also have hypothalamus, which is higher up from the pituatary, so that's like mission control, sends down the to the pituatari, to out signals to our hormones.

You could use brain protomorphogens specifically for what you're targeting. Pituitary would be helping with hormones. It would also be growth hormone.

ovary signaling. If you wanted to use the pituitary open, you know, with something called OVEX, which is another version of a peptide offering, it's called a cytosol based type of offering from standard process, where it stimulates the ovaries.

So you could take the Pituitarian and message down to the Ovaries and support that particular complex.

Peptides, Bioregulators, and Mitochondrial Support

Adrenotropin, adrenals. So if you know like my adranals are, you I'm super jumpy when there's a loud sound behind me. You know, I think my inflammation is coming from my nervous system.

I would consider putting the adronotrope in, which helps with the Adranos combined with a neurotropen which help us with our brain, brain-adrenal connection.

See if can help support those two. while you're working on blood sugar, while working other things. I've used these together with GLP-1s to kind of bring the whole process in order.

Especially when someone has been afraid to use what's known as the Cavinson peptides, they're bioregulators. So there's something called xenolutin. It's bio-ovary.

And if we're looking at the number and letter that go with it, it's the A15. bioregulator. And this one's great for rebooting the ovaries or helping someone that lost their period because of stress or someone who is going through menopause, perimenopausal, and they want to kind of give as much as they can back to those ovary to keep them producing hormones as possible.

But they're also looking at the inflammation side of things. They didn't start hormones yet. That's something to consider. I'd also even pair these with hormones too at a microdose if I was going to do it.

But at the end of the day, what I'm saying here is that if our peptides go away and the bioregulators go in 2026, we have options. Standard process, Royal Lee was on top of it in the 30s.

These have been around a long time. I've used them for my entire practice and really starting to ramp them up now because I just want to make sure we had something.

Now, I just mentioned those. There's ones for the liver, there's one for bladder, you can name it, bone, every single thing, just like the Cavinson peptides, which are the peptide that Vladimir Cavison developed in the 70s in Russia.

And we can mimic this stuff. So if it goes away, we got it. If you go to Europe, then grab some. here in the US, we don't know what's going to happen.

So that's why I said I got to, which is why i'm going lead into, I'm gonna create a community to help folks work through this and kind of take some of the tidbits from Chinese medicine because a lot of, the idea of protomorphogens and things in that nature came from chinese medicine.

Because the Chinese, if they felt like their heart energy was deficient, they would eat animal heart. If they felt like their liver was deficient, that liver blood deficiency or anemia, they would eat liver.

Every single organ is an option in the Chinese medicine. I've read, you know, all of it in The Principles. And so now it's popular to take the different organs, but the difference between organs and protomorphogens and peptides is that if you take a whole organ, your body's got to figure out what it needs from that organ.

But if you're doing a bioregulator or you are doing protomorphogen, that's more pinpointed to help you out. So there you have it there. Now, I teased a little bit about SS31, the peptide that helps to reset the mitochondria.

I think that one's a great one to pair with a terzepotide or retratatide. If you're up for experimenting a bit more and you need like a win on some energy, MOTC is a game changer.

It burns like the dickens when you inject it, but it is worth it. So we'll be seeing a lot more of SS31 because it is a legal peptide, you can get a hold of it, whereas MOTC, hit or miss.

That's where we're at with the mitochondria. And I do think that if we are going to work on inflamaging, we do need

to at least support our mitochondrion atleast twice a year with a little bit of ss31.

If you're really depleted, then consider trying to find a good source of MotC. Now, when it comes to the brain and cognition. and preventing Alzheimer's dementia and other neurodegenerative conditions, but also getting your brain back, we have options.

There are peptides called CMAX and Slink that can be used with a nasal spray, they can also be injected. We also have something called J147, which is an oral peptide, and it enhances the mitochondria, so little factories that make ATP function in your brains.

It's pretty cool. So it's helping produce ATP in the brain, and it is more potent than SS31 and other things when it comes to working, because this works specifically on the general mitochondria in the body.

Now, we also have something called P21, which is a little bit harder to get a hold of. And it's coming from cerebral lysin, one of the most amazing brain boosting and focus peptides out there, but that one is pretty much only available in Europe now.

The P 21 has a nasal spray delivery option, and I have found it at a company called peptide sciences. How long that's gonna be available, I don't know, but something to consider.

J147 or 147, that one is hit or miss where you find it, so you gotta be really discerning on your sources. And here's the thing about peptide sources, you want to see their certificate of authenticity and the testing that has been done on these things.

Now, if you want to take it to another level, invest a little bit in a third party company and don't invest in third-party company for testing, that would be really expensive unless you really wanted to.

But invest an extra bottle of what you're going to use and send it too a 3rd party testing company to get. a readout on what's in there. You can totally do that.

Now here's the thing, if the company's already showing it to you, I would hope that they're going to be sincere, but let's face it, there's a lot of scammers out there and I think that's why the FDA currently is doing what they are doing to help protect us from scams.

So in this weird time of what do we do with peptides, just stay very discerning. That's what I can say. Now, when it comes to helping your lymph and circulation as a whole, if you're looking like, wow, I really need some help with circulation, there is a bioregulator called Vasugin.

And this one may or may not be around going forward in 2026. I don't have really a great substitute for it in terms of a peptide. but I have awesome substitutes for it in terms of Chinese herbs like nodo ginseng, donkwai, and other herbs that boost circulation like gingko.

So I'm not necessarily worried about this. We got other things. Same thing goes with lymph and moving lymph. There are some amazing acupressure tools.

I've done podcasts, I'd done presentations on them. Sweating. Number one way to open up your skin and open that detox capability There's sauna bags now, there's red light therapy pads, they're steam showers, their saunas, I mean there are ways to sweat.

If you're not a good sweater, you can train yourself to start sweating. Exercise, usually the most fit folks are gonna sweat the least. So, things to think about.

I've already talked about HRV in terms of monitoring your nervous system, but you can dial in HRT types of training, so conditioning training to condition your heart, and that'll help with circulation as well.

Right now it's really hot to talk about exercise snacks. If you haven't heard of that term, it is 30 seconds going as hard as you So 90 seconds a day to challenge your heart.

And there's some really cool capabilities of how much it helps to improve your cardiovascular function. So something to think about if you're like, I need something To boost my circulation.

The other thing for circulation that I love more than anything Qigong and Tai Chi. There are plenty of techniques to work on your hands and fingers to get circulation to them.

There's lots of fun techniques. To get lymph and blood moving. I love this. And I loved that Tai Chi has also evolved into having it's like people who do Tai chi workouts.

Super fun. Tai-chi walking. That's a hot thing right now. All right, we've made it into a full-on fitness thing. I dig it. Because back in the day we used to see folks doing Tai Chi in a park, and we imagine older folks do that.

And if you're in your 40s to 60s, you know you were like, that's not me. Imma do it when I'm in my 80s and 90s. But I think there's benefit now, when we kind of made a little cooler.

So I love it, I Love it! So, inflammation. You can tackle it, you can eliminate it. You could manage it." And when I say eliminate, I had to stop there for a minute because I'm like, well, can you fully eliminate?

Practical Strategies for Reducing Inflammation

I mean, don't want to because you need it for protective capability if you hurt yourself. So I am going to retract my statement there and go back to inflammation.

We want make sure that we regulate it well. And we want to make sure we're on top of it, because that is the main way to counter the signs of aging as you get older.

We have some really awesome tools available to us right now that are legal, and then we have something that we are going to have to work on. Now, copper GHQ, you can get that in the mainstream.

I'm going be playing with it this year to help folks with their skin, cause if you know me, I used to like to play around with doing injections and micro-needling with platelet-rich plasma.

Now I'm going to see what we can maybe do with some copper GHQ. What's on the horizon for peptides, and this may be something that comes out new in the next year or so with maybe the ones that are more legal, is dermal.

So applications topically with little micro needles that you can put on in a patch to deliver the peptide versus having to do injections all the time, because let's face it, I don't know about you guys, I'm a geek, and I like needles.

If you're not into injecting, there are things that are coming out there. Peptides are as strong as the injectables. I truly believe that. Now, am I gonna say the oral ones are junk?

No, you're probably just gonna have like 50% of your benefit. With the exception of BPC-157, so this one, if you have a leaky gut, Body Protective Complex 157 is one of the best things for leakey gut.

Hands down, I love that, that one orally. No that's for your gut Notice I'm not saying for tendons and ligaments, shoulder injuries, I gonna say you gotta inject to get the best effect.

So, alright, I could talk for hours on how much I love these different things and where I've seen benefit, but I do think injectable is better. Nasal sprays are decent, and if you're like I just can't inject myself, that's okay.

Use the oral stuff. They do work. The PMGs, the protomorphogens, in the bioregulators actually work well orally, by the way. Straight peptides, which are are going to be the ones like the SS-31 and the terzapatides do do better

injectable.

Alright, so. What am I up to in 2026? I am looking for your input. And I'd love to know if you guys are interested in a community. If you would like to hear more information on the peptides and how you can optimize your health, reduce your inflammation and not be taking handfuls of stinking supplements.

because I am on a mission to figure out how we can lower how many things we have to take. And of course, yes, it may swap with a little bit of injections based on what I'm talking about here.

I try to find out best how I can support you guys going forward. And I'm going to switch up the podcast a little bit in 2026 where we do some trips and we look at spa vacays and different things of that nature to help you kind of round out how to get that neuroinflammation down because I truly believe that brain inflammation and neuro inflammation are some of the things that really impact our ability to think clearly when it comes to health and our Ability to Think Clearly when It Comes to Being Able to Take Care of Ourselves on a Foundational Level.

It's what gets us to skip meals, it causes us I'll do it later, I don't feel like I'm so tired and has us making poor choices. So if I can impart anything in 2026, look at your inflammation.

Look where things are going south and work on the blood sugar component, work in the brain component and the circulation component as it relates to your entire body.

If you're interested in taking a survey for me to help you learn more about what you are interested and how I can best help using the podcast but also some live Q&A's, some webinars, I just really want to offer sound advice from someone that's been in the field for almost 20 years now because I'm seeing so many people using AI and I think it's great for foundational direction.

But AI hasn't been in the field. It doesn't know the inside out and it doesn' know you. And so I'm looking for how I can bridge the gap between the mess that is the medical system, folks searching out their own answers to help their health, and how can I bridge that gap and help empower you to take the steps that are going to be awesome for your health and longevity.

Thanks for listening to the health fix podcast this year. And if you've been around for a long time, for all these years, eight years is crazy. It's been that long.

I can't say thank you enough and I'm committed to keep doing this. and helping bridge that gap. So if you're open helping out, please fill out the survey.

And anyone who completes the Survey is going to be entered for a chance to win a 90 minute 2026 health strategy session with me one on one. I'm gonna keep it open until January 8th, and then on January 9th I am gonna announce the winner.

So, if you're open to helping me out, I'd really appreciate it. Thank you guys, have a great day, whatever you are doing. Hey fellow health junkie, thanks for listening to the health fix podcast.

If you enjoyed tuning in, please help support me to get the word out about the podcast, subscribe, rate and review and just get that word. Thanks again for