Introduction to GLP-1 hormones

The key thing about our own hormones is that they last for about two to five minutes. They're designed kind of like a motion detector. So they switch on real quickly, so I call them the switch, and then they're destroyed because their sole job is to get where they're supposed to go to trigger other actions to occur.

So that is interesting. And when we started to learn about those hormones, for me, it was when I had a bariatric patient, my first one who had weight loss surgery, and I saw that immediately, like immediately after surgery, their desire for food totally shifted.

And it was really interesting to see within days and within days like diabetes was gone. Welcome to this episode of the Think Well, Age Well podcast. I'm your host, Dr.

Heather Sandison, and I am delighted to introduce you today to Ashley Koff. She is the founder of the Better Nutrition Program and the nutrition director for UC Irvine's Susan Cimelli Integrative and Functional Medicine Fellowship.

She's also the author of the upcoming book, Your Best Shot, the personalized system for optimal weight health. And it will be out January 6th of 2026, right around the corner.

I met Ashley up at the PLMI conference about a year ago, and I was really struck by how well she articulates, engages, and explains complex science around weight health, particularly the use of these shots that we've all been hearing about, the GLP-1s like ozempic and zep-bound.

Maybe you've heard it as Wigovy or Semi-Glutide, there's a lot of names for these. And I'd love to share with our audience, kind of get out of this idea, the box of this being for weight loss, and really think like Ashley is, transforming this paradigm to thinking about weight health, particularly as we age.

She has been a practitioner for over 25 years, so has decades of experience to share with us, and she's really leading this transformative movement. and personalized nutrition.

So it's a precision-based, personalized approach to making sure that the nutrients we're getting are working for us, turning better, not perfect choices into practical day-to-day strategies that help us with our outcomes.

And these ideas will sound familiar to you, and you can see why I've invited her here today, because there's so much alignment about how we approach health outcomes.

So, we're going to get into some stories and also some of the science around how to achieve this. So, Ashley, thank you so much for taking the time to join us today.

How GLP-1 medications work

Welcome. Thank you so much. It's so fun. You know, the personalized lifestyle medicine conference is one of my favorites of the year because it really is this opportunity for us as clinicians to come together and look at it in this holistic way, you know.

So, I loved that and meeting you there and just so excited we can have this follow-up conversation. So will you just describe for everyone who maybe has heard about Ozempic, knows someone who's on Ozempic, but doesn't really understand what's going on, can you just describe what these GLP-1s are?

Sure. I think the best place to start is what GLP-1 actually is. And so GLP-1 is one of, so glucagon-like peptide-1,

and there's also GLP-2. But these are GIP, PYY, CCK, a whole alphabet soup.

They are what I term our weight health hormones and they exist in the lining of our digestive tract as well as throughout our digestive system. That's where they're made secreted and then they are deployed to receptor sites throughout our body.

We'll talk about throughout our brain, in our arteries, on our heart muscle, in our pancreas. So these are important, important hormones. They're peptide hormones, which means they're made from proteins.

And these hormones regulate fat, muscle, bone, blood sugar, and as a result have an impact on inflammation and cognitive health, liver function, like everything.

So why I call them our weight health hormones is because they are helping us understand that our body, actually our weight, how much muscle we have, how much bone we have, how much fat we have, where all of it's allocated is a part of our overall health.

They're not two separate things, right? So that's really important to know. The key thing about our own hormones is that they last for about two to five minutes.

They're designed kind of like a motion detector. So they switch on real quickly, so I call them the switch, and then they're destroyed because their sole job is to get where they're supposed to go to trigger other actions to occur.

So that is interesting. And when we started to learn about those hormones, for me, it was when I had a bariatric patient, my first one who had weight loss surgery, and I saw that immediately, like immediately after surgery, their desire for food totally shifted.

And it was really interesting to see within days. And within days, like diabetes was gone. I mean, and that sounds like crazy to be like, you know, I'm selling you something.

No, it was just really, I learned, wow, we have these hormones. And if we can help them work better, look at what can happen, right? So while I was learning about that in our own hormones and like figuring out how to repair them and optimize them in our own bodies, scientists were like, huh, I think we're onto something.

What if we could actually find a way to make a medication that works like these hormones? Because it's very clear that in so many people, these hormones aren't working.

So it's really interesting. It led them to a Gila monster. A Gila monster is a prehistoric animal that is solving our modern day weight health crisis.

It's like totally where, you know, it's like, it's a dinosaur, literally. And I jokingly say it's like every perimenopausal woman because it wants to spend like 90% of its time in a cold, dark place away from everyone.

It's like under penalty of death, do I go out to like, you know, find food. So it is actually designed, it has a hormone in its own body, it's actually in its venom that allows it to eat fat from its tush for about 30 days.

And then at a certain point, this venom, and this is why it goes out, this is what signals it to be like, oh gosh, like I need to actually go risk everything and go find food.

So it really doesn't think about going and getting food for about 30 days, right? So we didn't want that in humans, but what the scientists were able to do was to look at that and they were like, you know what, it's very similar to our own peptide chain.

So a peptide hormone is a series of amino acids. And what they were able to do in a lab was to take a series of amino acids and manipulate it so that it could go into our body and our body would receive it as the hormone that it knows.

And it would be able to get to all of these receptor sites, but something very different would happen. it would stay on. At first, it would stay on for one day, and so that was liraglutide, and that was the injection.

Training wheels for weight health

And then they were able to figure out, with semiglutide and terzepotide, how to get it to stay on for like 24 hours, for like five, seven days, depending on sort of what is going on in the individual.

And that's how we had this shot now heard around the world, So we have something that actually mimics our own hormones. So just like we have insulin that we can take externally, we have thyroid hormone, we have testosterone, we have estrogen, those hormones tend to mimic ours exactly.

This one has a very big difference in that difference in timing amount, but it allows people to actually get the experience of having all these receptor sites in their body satisfied with this hormone.

As you and I'll talk about, Heather, it also does other things. So we want to understand that because that's where side effects and challenges can come up that we want to make sure, you know, that we're considering, but that's the difference of how they work.

So it's important for us to know that the shot is not a GLP-1 is not a shot. A GLP-1 is our own hormone, but now there's a, there is a version of it that comes by way of a medication.

And you made a really important point when I saw you speak at the conference, and that was that, okay, we can give these shots that stay on these receptors for longer than our regular hormones do.

And although they're like our own hormones, so they're similar, they're not bioidentical, but bio-similar, our bodies know what to do with them. And yet if we take them away, so say someone's been on this shot, has been taking semiglutide or taking terzapotide for a year or so, and they've gotten to maybe their inflammation goals are achieved, their weight goals are achieved, but we take that away.

the underlying GLP-1 imbalance or other imbalances, they might still be there. And so if we haven't addressed that, then we're kind of back in the same spot where we started after sometimes weeks, sometimes months.

So how do you think through creating balance in that hormone signaling pathway, in that whole conversation that the body is having. How do we create that balance if we're using these medications as sort of a crutch to get there?

Yeah, and I think of them, crutch is a great term, I think of them as training wheels, or they may be ongoing support, you know, because somebody may need it for the rest of their life.

And that's a win if it helps them, like I have patients, excuse me, who are using that, who are off all of their other medications, like that's a total win to me, you know, in that regard, and they're weight healthy, you know, so that is a win.

So the reason that my book talks about being a personalized system for optimizing weight health GLP-1 shot or not is that anyone, everyone, because we make this in our own body, we need to optimize.

So weight health optimization, weight health hormone optimization is a foundational essential part of our nutrition and our lifestyle, and we need to be doing that.

We need to assess our function and optimizing it as indicated. If you are on the medication, then you have told me we have evidence then that your own hormones were not working.

So we absolutely know that there is something suboptimal in that system. And if we don't repair that and we just come in and we give something to override it, if you will, on that part, then as you said, you're always going to need that tool.

We have examples like that across all of medicine. So if you go on a statin, and you just expect the statin to lower your cholesterol, you actually are not heart healthy.

We need to optimize heart health because that has to do with blood flow, that has to do with endothelial glycocalyx. I mean, it has to do with so many things right in there.

If you just use a statin to lower cholesterol, you can oftentimes miss what you actually need to be optimizing. We see that with medications to address depression.

If you're on an SSRI, when we're working on our serotonin, we're using a reuptake there, If you use that medication and you don't do the therapy and you don't optimize digestion and you don't support your vagus nerve and do these other things, you are always going to need that antidepressant.

By the way, you may always need that antidepressant because it may be the liaison to optimizing your mental health, but you are going to set yourself up for other physiologic health issues because of how that medication works in the body.

I could go on and on with examples. So the key thing for us to understand here is that I think there's a foundational piece that if you are using one of these, if and when you use one of these medications, you also want to recognize that it is going to allow your body, those receptor sites to be satisfied across the board.

So let's say you have a hundred receptor sites and now like maybe suddenly for the first time in your life, like 95, I never believe in perfect, but like 95 of a hundred, you know, are getting satisfied.

Whereas before maybe seven were actually getting satisfied. You feel amazing. Like there's all of this differentiation that's in there. If you go off the medication and you just go off of it, your body goes back to seven.

And it might, and this is interesting, we're getting more and more information about this and evidence, when you're on the medication and it's satisfying those 95, what happens in your own body?

Your own body doesn't get the signals to produce and secrete GLP-1. because the receptor sites are satisfied. Well, what's interesting is then you also aren't getting the signals to deploy PYY, CCK, GIP in the same way, right?

Benefits beyond weight loss

So when you're agonisting, when you're using the medication, your own body suppression of these and the whole system approach is likely going to be impacted.

And that is where we also see other issues when somebody tries to just come off of them. So where my work is, is it works across the board. If you do not need, do not want, do not have access to, if conditions are set up and it's like this is not better for you, then we don't use that tool in our toolkit.

That's all that the medication is. It's not a solution. We just don't use that tool. If we use that tool, we want to make sure that we are optimizing while you're on it.

And then when we're achieving goals, what we want to look at is a plan for moving forward. Are we going to wean you to a maintenance? And that might be a maintenance dose, a different dose, or it may be a different frequency.

So I have somebody who's on it once a quarter. I have somebody else who uses it once a month. I have somebody else who was at a very high dose who is now at a lower dose and is using that dose, you know, ongoing on that part.

So I think there's opportunities for us. And then we also have people who have come off of them. And this is important psychologically, they felt like a success even more so because they were able to not just achieve their weight health goals, but also come off the medication.

Well, what happened is life through a curveball. That curveball could be in this case, it was a divorce and a custody battle and just like kind of in a financial issue, like all things were upended.

Other curveballs that I've seen are disease or injury where somebody needed to have treatments and they couldn't be on the medication. And what happened then is the circumstances occurred where we decided to, we actually needed to restart the medication.

And I had to do a lot of work with the therapist and with my patient and all of us collaboratively to realize that you're not a success or failure ever based on your weight, based on your even your weight health and certainly based on what tools that you're using.

Anybody who judges you for that has their own stuff to deal with. And if you're judging yourself for that, we want to work on your mindset, which is really your beliefs about yourself, as opposed to the facts.

And the facts are that I needed this resource. And I say that as somebody who if only this tool had been available when I was maybe 15, 16, 17 to help me, it would have helped me avoid eating disorders.

And while I was never diagnosed with an actual eating disorder, I tried eating disorders and I felt like a failure because I couldn't succeed with them.

And a variety of different things that moved me further away from weight health before I was ultimately able to get the help that I need. You know, I look at this and say, this is very personal and it's personal for each of my patients and each of you and every life stage I think is the important thing for us to think about there too.

I want to talk about the benefits of this. So why someone would use this. I had a patient just this week and it was really fun. We were looking at her labs.

I've seen her for probably the last eight years and she's always had this persistently high HSCRP, this indicator that there's generalized inflammation.

And it was never as high like that we would think she had cancer, but it was around the twos, threes. And she also had a sense of, she felt overweight certainly, but she had this sense of like a little bit of pain and achiness and like she never just felt good.

And this year, after about nine months of semi-glutide, her inflammation levels, all of them are in the normal range. So her HSCRP is now at 0.3 instead of up over one.

And another patient of mine, she described after being on trisipatide for a couple of weeks even, almost instantly, she said, the food noise. I didn't realize that as I was eating a meal, I was thinking about my next meal.

I was always kind of obsessed with where I was going to get my next meal from, the ice cream I was going to have after dinner. While I'm eating, I'm thinking about what I'm going to eat next.

And she said it was like this freedom that she didn't think about it constantly. And so it opened a bandwidth for other things in her life. And those aren't the only potential benefits.

So would you just run us through, of course, weight loss is one of them, inflammation is one of them, the food noise is one of them, but you mentioned bone and brain.

So what are some of the benefits that people can get from using this tool? Yeah, so one of the second chapter or third chapter, I forget of my book, fourth chapter or whatever, but I use a curse word, it's SH asterisk T and the asterisk is not an O in that part.

But to unlearn, we have a lot we have to unlearn and the weight that so many of us are weighed down by and that makes us feel badly and that interferes with our ability to fulfill our life's purpose and to enjoy our lives And that

honestly sometimes is like so, like I know at 50 when I don't feel good about my body, I'm so much more mad at myself than I even was at 20 because at 50 I'm like, girl, like you're an adult, like you are a grown woman, like stop judging your appearance or stop, you know, that kind of thing.

And so it's like, makes me even more mad, right? And I feel like every decade, you know, we have that. And so there is so much weight. So the weight of information that doesn't help us, you know, things like the total, your total weight, being a marker of anything.

It literally isn't a marker. It's not helpful. Someday, I hope there are scales that just don't even give us that total number. I don't care about it.

I care about your muscle, your bone, and your fat. Where they are in your body, how much of them you're carrying, and are they able to do what they're supposed to do for your body, because that's going to give me indication about your health.

Your total cholesterol, not a helpful number. We need to know your particles. We need to understand. And we need to stop saying LDL is bad cholesterol and HDL is good cholesterol.

We need to look at how all of them are functioning. We need to understand your triglycerides, all of these different things. And this is so important on that piece.

We need to understand that your bowel function, like how your gut is functioning, is what actually gives your body, like that's where you get credit for the kale or the wild salmon.

If you just eat it, and it doesn't get to where it's supposed to go in your body, because your digestion is altered, and by the way, every one of us who is aging, which means every one of us who's alive, has altered or has changes in our digestion throughout our lives, and certainly the process of aging brings those forward.

So it's really important when we talk about this, like offloading that weight. So I'm thinking really about your second person, but I bet it is even with your first person, because when you are able to worry less about things like lab markers that don't look good, that you're like, I'm trying.

Total blood sugar, even Heboglobin A1c is another example. I have people that are trying so hard to lower their A1c, and I was like, you guys, it's a 90-day average.

Don't try to lower your A1c. Let's actually try to optimize your blood sugar, and we see that with continuous glucose monitoring, and we can look at fasting insulin, and we can assess other things on that part.

So I think that there is a key piece here that what these medications can do, remember when we have receptor sites throughout the body, that tells us that it needs something.

And so when those needs are being met, the ecosystem starts to work better. So it's like a garden that maybe before the approach was to keep watering the plant, but the plant really needed sunlight.

or the soil needed to have more nutrients in there so that the plant could grow because it just is nutrient-deprived, et cetera.

Supplements and activation options

So this is an ecosystem situation. So why do I say that? So for your first patient where CRP, which is when we're looking at C-reactive protein, and that's produced when the body is experiencing unresolved inflammation, one of the things that we're seeing is that some of the receptor sites where these hormones are going to is actually helping the body with its inflammatory response.

Now, that's not all that happens. So you can't do that and not get in what your body needs to both prevent and

resolve inflammation. So it doesn't mean you take semi-glutide and you don't get in pro-resolving mediators, or you don't eat fatty fish, or if you don't eat fatty fish, you don't look to things like hemp seeds or walnuts or supplements, you know, to complement it.

So we need to do all of that work, but why is that important? It's important because this helps nourish our brain. So the things that cause cognitive decline are overwhelming our brain or create bringing toxins into our brain or impairing our brain's ability to run better.

And so what this medication does is twofold. Number one, it's going in at satisfying receptor sites so that like we kind of join there's this trend on TikTok called the we do not care club.

And it's like, this woman started it, you know, and she was like, like, at this stage, like we do not care. And she's so funny. And it's, you know, it's, it's exploded.

But you know, what a lot of my patients say is like semi-glutite is like the ultimate we do not care. Now that can have downsides. I have some people who literally don't care about eating at all.

And that's important for us to note because under eating is very problematic, especially as we age, because we need to resource our body. But the second thing is, what if for the first time in your life you're present at a family meal because you're not thinking about what you shouldn't eat and what you should eat?

Or what about for the first time in your life you actually are enjoying the taste of what you're eating because you're not judging yourself for eating it, right?

So that impacts your stress response and that helps lower inflammation. And that actually helps our brains work better. So what you're seeing, and Heather, I love that you're picking up on it because I know it's being called food noise, but it really is just about noise.

And quite honestly, like, I think it's a little more severe for women. I'm going to say this, this is a little bit of a stereotype, but stick with me for a second, guys.

It is so much worse for you today because you are being dropped in and bombarded into the diet industry like today, like the last 10 years have just been horrific.

And I see it in my male clients of every age, you know, on that part. But as women, we have been like so like just bombarded and overwhelmed with from the diet industry since like really the 60s, 70s on that part.

And so we carry in our brains like this ridiculous amount of diet information. And that diet information directs, it doesn't just direct our choices, but unfortunately it hampers our vagus nerve.

What's really interesting about our vagus nerve is our vagus nerve is what sends signals to tell these hormones to go to work. but it's also what transports those hormones to our brain.

If we put it all together, if we're challenging our vagus nerve, which just wants to be safe and happy, it literally just wants to knit and hang out and be cozy.

When we bring in these messages of self-hate, of doubting ourselves, of doing things to harm our body in the name of a number on a scale, you know, wearing too tight clothing or things to tighten us up in there.

So our digestion is it like all of these different things, we actually hamper our own weight health hormones. And that leads to not just unhappiness in terms of our body size, but it challenges our body's ability to our cognitive decline, our heart health, our blood sugar, all of that.

And yes, these hormones also regulate our bone health. So that's really interesting for us to understand that in repairing and building bone and maintaining bone health, these hormones are a part of that picture.

That's why I call them, you know, weight health on that piece. So I love that you had two concrete examples there. My book is filled with many more, you know, in terms of how that plays out.

But I think that what we all want to think about is not the message here is don't rush out and get on this medication for those things. But the message here is to assess your weight health hormones and understand weight health And then if there are signals and there are things that you cannot accomplish with your nutrition, with your lifestyle, we need to then look at what I call in the book, toppings, like the toppings on pizza, which are medications and supplements and choices that may help us to really activate or even replace our own hormones for a period of time so you can get those results.

So you make this great point about the messages that both men and women are sent about what the ideal body type looks like. And there's been these pendulum shifts, I think, of accepting everybody in every shape.

And then somebody will fight back and say, no, but that's not healthy. And what we want is healthy and that starts to look like very, very thin and it's different for everyone.

But I think the other context I want to put this conversation in is that inner conflict that I, I mean, I experienced this personally. What's available, inexpensive and convenient in our busy lives is not healthy.

And then, you know, I went to naturopathic school. You're a registered dietitian. We know what is good for us, but it's often inconvenient or expensive.

And then also, there's so much dietary advice out there that might be good that maybe it's not good for me right now. Yes, I love that. It changes throughout our lives, right?

A hormonal teenager who's very involved in athletics is going to have a very different nutrient need than somebody going through menopause. So I think keeping all that in mind Um, cause I really appreciate you putting this, this conversation in the context of the messages that were sent.

I have so many questions and I love this conversation. Thank you. I know that so many people have questions, but, and there's so much nuance to it. And, and also I think a lot of people are finding.

that, okay, I can just go online and I can order this and then I don't really have the guidance that I need. And there is the mental-emotional piece. There is the weight piece, of course, but there's this in for me.

There's so much to it. And so I'm just so grateful for the opportunity to dive in. I want to ask one simple, hopefully, question. Is there a supplement, is there something we can take either orally, a medication orally, or a supplement that I can take that would help support GLP-1 signaling in my body?

So not a shot, but another alternative. Yeah, but we have to come back to health at every size. So I've got to start there and I'm going to answer your question.

The question is, I love my colleagues who have focused on as a rebellion against the diet industry, the conversation of, but we can be healthy at every size.

So we can be. The question is, are you healthy at your size? So I want to be really clear. I spent 15 years working in Hollywood. I still see quote unquote celebrity clients and their celebrities because they're professional athletes, they're entertainers, you know, or doing other things where they're in the in the public eye and their size matters, right?

But they're at their size, like any one of them that came in to me, the question was, what isn't working? So why are we here from a health standpoint?

And that's what we have to unpack for you. So if you are a woman, let's say in your, I just was working with somebody the other day, if you're a woman in your 70s, and you are at what one might externally see as a

desirable weight, I'm going to want to know, okay, but tell me your muscle and your bone.

I got to look at that. And how's your cognitive function? And it's definitely going to bring me back to your digestion. And that's going to be really important.

Why do I start there? Because supplements are similar and different from medications. Medications come in and they either override or they encourage something to happen.

And we usually use them because either something is happening wrong and we want to try to correct for it, or something is happening and it's not happening at a pace that we need it and so we want to amplify it, right?

But they come in and they do that for your body. That is what a medication does. So when we think about that, if they are doing one thing in your body, then of course they are going to have other disturbances in your ecosystem because, and again, as we talked about at the start of this conversation, we have to understand what wasn't functioning and fix that, but we may use those for a period of time or ongoing.

Supplements are different. So, supplements are nutrient compounds. They come, maybe they're from plants, maybe they're from animals, maybe they're made in a lab, so they could be something synthetic, all of those pieces.

And they come in, and the goal there is to, hopefully, for them to come in and complement your body.

Side effects, risks, and mitigation

So, the way that I think about supplements is three different ways. The first way is for you to, if you've identified that you have a gap in your nutrition, I don't eat fish, and I'm allergic to nuts, and as a result, I'm not going to get in my omega-3s where, and by the way, we should be thinking omega-3s, omega-6s, omega-9s, there's a lot of omegas in fish, but if I'm not getting that in, where can I then get those nutrients in from?

Then there's another role, which is not that I have an issue that I can't get something in, but I have preferences or I have choices and I'm worried or I'm concerned or I'm just living life and I don't eat the same thing every day.

Like as an example, broccoli, my favorite food, probably my curly hair and like what I know about glucoraphanin now, but I don't eat broccoli every day.

My dog gets broccoli almost every day, so I don't supplement my dog with glucoraphanin. I take glucoraphanin because I wanna make sure that my body is able to turn it into sulforaphane because I want my brain and I want my body's detoxification systems to work effectively so that I know that the toxins that I'm exposed to, because I love to hike and run outside, that those toxins and everything else that's not in my control, that the body is working its best to be able to detoxify and eliminate those.

So that's the second role. The third role for supplements is that they can come in and they can be a therapeutic adjunct to a medication. So if I am taking a statin, a cholesterol-lowering medication, it is going to impact my body's amount of coenzyme Q10.

So coenzyme Q10 is then a supplement that I'm going to recommend to somebody who is on a statin. I have them take them at separate times. And likewise, I'm also going to assess somebody's testosterone levels and make sure that if they're on a statin that we're not seeing lower testosterone levels in men or women.

And then I might need to look at what would I need to do to correct for that. Or, you know, I mentioned an SSRI before, and if it impairs, you know, the body's ability to absorb B vitamins, then I'm gonna come in and say, maybe I need more B vitamins every single day that I'm taking this medication to make sure, and I'm not gonna necessarily get that from food.

So when we look at supplements that way and we ask the question about what about our own weight health

hormones, what I, and I talk about this in the book, there are three different, we have a whole spectrum.

So on one end of the spectrum is weight health hormone replacement, and those are your medications. They come in, they replace them, they function for a lot longer than our own, and they do a lot of great things, and we have to understand what they do and optimize for that.

Then on the other side, the whole other side of the spectrum is what I call GLP-1 or switch or weight health hormone optimizers. Some of those are direct optimizers, things like an acromansia, which is a type of a probiotic.

In the lining of your digestive tract, it chews up mucin. It's called acromansia mucinophilia. When it chews up that mucin, it's part of helping the body to both produce and then also to maintain deployment of our weight health hormones.

So there is advantage in there. It eats polyphenols. So we need to make sure that we're getting the polyphenols in so that there's on that part. Those polyphenols and other things that we want to create short chain fatty acids, those are going to come from the fibers that we're consuming.

So we can start to look at in the ones when you ask me if there's a supplement, I always ask the question back on that part, which says, what are you able to get from food?

And then what are you not getting from food? And that's how I personalize your supplement recommendations. So glutamine, creatine, omegas, pro-resolving mediators, glucoraphan, I mean, the list goes on, right?

These are all weight health hormone optimizers in that part. And then there's this middle category, and that is called GLP-1 or weight health hormone activation.

I like for it to be called weight-health hormone and not just GLP-1 because it turns out that the one compound where there's actually good human evidence on right now, and I assume by even the time this airs, there might be others that have come out, but the one that I've looked at and worked with with my patients, it actually is secreting at a higher level, helping the body to produce and secrete at a higher level.

and GLP-1, and likely GLP-2, maybe some GIP in there. So it's really working on the whole ecosystem in that. And that is from a New Zealand hops, and the name of it is Amerisate.

And then the name of the ingredient that we recommend to our patients is called Calocurb. And there's Calocurb and there's Calocurb Clinical. But that only works at about 600 percent.

Above 400 is what you really need to make sure that you're getting some of the appetite and that you're getting some of the food noise and that cravings.

But what I haven't seen on that part alone, that one there, is that it has the same benefits on things like inflammation and some of the other stuff. What's interesting to me is there are all these different pathways and receptor sites for the particular hormones.

And so it may be that we need a combination of different things to activate and get all of those benefits. So we bring it back when we think about a supplement and everybody who's listening, if you are taking one supplement or if you're taking 85 supplements, you have to be able to justify, you need to be able to tell me, I know this supplement is working because, and if you can't answer that, and it may be hard to say like this supplement is working to prevent Alzheimer's because until I, at which time I have lived my entire life and either do or don't have Alzheimer's, I'm not going to know, but what I can say about something is I know that this, like I have evidence in some capacity that this ingredient or in collaboration with other ingredients, it is helping me reduce brain fog or feel more focused or lower levels of inflammation as seen on my labs or poop better in the morning or have better afternoon energy.

still have a sex life at 70 like whatever it is on that part because I think too many people are taking supplements just

because they've been told or to your point whether a lab test is telling them to go buy it or you know a practitioner or someone they like or you know want to look like or whatever it is is telling them that that's what they use And that's a problem because it's not actually helping.

We don't know what it's doing in your body. The wrong supplements or the wrong amounts of supplements or the wrong form of supplements can overwhelm or alter your ecosystem in a non favorable way.

And then it's also just an issue for your budget. Like why spend your money on that? You know, save for retirement or if you're in retirement, enjoy a little bit more money on that part.

Yeah, we always say supplements are supplemental. This isn't the foundation, they're tools, just like potentially a GLP-1 injection is. These are just tools that we want to use to create balance in the body.

I want to talk about the side effects. We've heard, I've certainly seen people who've lost their hair after using GLP-1s. We have concerns about frailty for people who are aging.

So in the context of, say, patients over 65, what are some of the considerations and side effects or risks that we can potentially mitigate or we want to be mindful about?

Yeah. I love talking about pros and considerations. I usually don't think there are actual cons unless somebody is selling you something and not working with a practitioner or that kind of thing.

But I think this is really important. I mean, can we just double click on that? Yeah. You just said there really aren't a lot of cons when it comes to the LP-1s.

When I think about all the medications and all the supplements and all the things out there, there are so many flashing warning signs. And what you're saying is that there's really not a lot of downside here.

Look, I'm more unhappy about like NSAIDs like Tylenol and Advil. And by the way, I want to move that away from any of the political conversations about any of those.

But, you know, when we use something like in that space and we don't understand what it's doing potentially to our gut lining, you know, et cetera. So, there are cons, which is somebody selling you it and it's not the actual ingredient, or there are cons where somebody is just selling you it as a solution.

Come here, we'll assess you, and we'll send you off this medication. That's a con in my book because they're not personalizing it to you. You know, what you do, what we do at the Better Nutrition Program, come in and we help to personalize protocols for people because of what I'm about to say on that part.

Number one, you have to understand how the medication works. There are things that people are being like, oh my gosh, this is a side effect. And you're like, that's not a side effect.

That is directly how the medication works. So the medication comes in and it slows gastric emptying. Why is that an issue? So does aging. Why is that also an issue?

So do other things, right? If we are less mobile, if we have less muscle, like there are a variety of things that can be slowing gastric emptying. What's another issue?

Many people, and especially as we age, are either appropriately or inappropriately, one of my con medications that are out there, are proton pump inhibitors.

We're suppressing acid in individuals. When we suppress acid in individuals, we challenge the ability to use calcium, we challenge the ability to absorb and make B12 into a usable form, we challenge the ability to take in protein and turn it into what is used.

And as a result, we actually have more digestive issues because we have undigested or partially digested protein going into the lower half of the body.

Yeah, and oftentimes we have our proton pump inhibitors given to people or people are over the counter taking acid suppressing medications and they actually have low acid.

They have low acid, not high acid, so we're lowering that. And then what are they told? They're put on one of these medications and they're told to consume more protein.

So you already weren't digesting your own protein and now you're being told to take in more protein and you wonder why all of these things are happening.

So number one, why are we losing hair? Very often, I would see this in bariatrics all the time, so this is not new. We are losing hair because over the course of three months, you are malnourished.

You have not met your protein needs. And remember, it's not about the protein that you were taking in. It's about your body's ability to digest and absorb the protein and have the protein get where it needs to go so that your body does not prioritize your hair.

Do you want to know when your body gets to your hair? it gets to your hair, it's like how for parents, like after all the things are done with the kids, all the things are done for our partners, all the things are done for the rest of our family, all the things are done for our pets, all the things are done for our neighbors because we like to build community.

Oh, and then we come and we focus on ourselves, right? That's what happens in the body with protein. Muscles get the first attention, hormones get the next, enzymes get attention, our skin gets attention before our hair gets, I mean, like all of these things.

So we lose hair and then we panic or we blame a medication. We shouldn't blame the medication. We should blame the inappropriate use of the medication.

We have to be optimizing from the get-go and making sure that people are able to absorb. So sometimes for me, that's digestive enzymes versus even increasing protein.

Almost all the time, that's starting off with glutamine, which is called a conditionally essential amino acid, but as I talk about in my book, is actually completely essential.

Even if we get it in, even if our body is making it, we don't have enough glutamine to do the repair work for our digestive system and our muscles, typically without a bit of supplementation.

So I often will use that in that space. And so when we think about that, that's really important because we're talking about the nutrients, vitamin K, we're talking about the nutrients that the bone needs, to make sure that it is able to rebuild.

And there's really interesting information. There's even a product, now a food product, that has come out that is working in the gut to help build bone, and it works on par with some of the bone building medications.

Like they've done research, you know, when you look at how an osteoclast and an osteoblast work, and it's all digestive focused, right? So it's like, oh.

So if we're altering, and I won't name that, we can maybe put in show notes, you know, I think, I mean, like, I'm happy on that part. I think it's Bonevia, Boneva.

I'd have to just make sure I have the right spelling for everybody. And I'm new to using it with patients, right? Like, because I've been doing all the repair work, you know, through everything else, but I'm like, the research that they

have, being able to show that is really exciting, you know, in that way, just like being able to resolve inflammation.

So when we look at that and we say, like, what should we be thinking about? We need to understand that it works that way. The other important part of understanding, so it's slowing digestion.

There are three parts. It's suppressing our own production, which can negatively impact hydration, and it can negatively impact other things that our hormones are doing in our body.

So we want to make sure that we're, yes, we're getting to receptor sites, but we're circumventing the pathways. So we want to nourish those pathways. And then let's talk about the brain.

So if it is calming down, if it's going to those receptor sites, it may be something where your appetite is actually, you're not experiencing appetite and you may also not be experiencing hunger.

So if that happens, I have people where they're not eating all day and then they're having one big meal at night. Like they're like, oh gosh, I'm supposed to get in a hundred grams of protein and they're having it at one time, right?

And so that overwhelms digestion, it impairs sleep, and it leaves us undernourished throughout the day. Our body is designed like a race car. We want to pit stop for nourishment regularly throughout the day.

And I think that's really important because that nourishment is water, that nourishment is electrolytes, that nourishment is food, and also by way of supplements, that nourishment is moving, that nourishment is time away from our computer.

So there's a lot of that. But we want to understand that what the medication is doing is when we're on it for those seven days, and especially at the start, it's getting us very metabolically activated because it's hitting all those receptor sites.

And so one of the things that people say is they're like, I'm on. Like they're like, I'm zooming. I had somebody where we had to like literally remove caffeine and that actually had a negative impact on an already slowing digestive system, right?

So we had to really work on motility. And so it was interesting, like kind of all the things that we had to impact, but she's like, I just, on this medication, I'm like, I'm wired.

Like I'm, you know, and I said, and you're also wired at night and not going to sleep. So what we're also seeing is we're seeing heart rate variability Blood oxygen score, body oxygen scores, we need to make sure that we're not keeping you, like we're not all yang and no yin on that piece.

So a lot of times I'm having to work on, for people who are on the medication, work on adjusting sleep very significantly. That may be supplements, that may be what time you go to sleep, that may be like kind of all the things that we know that we're meant to be doing, but we may actually need to do that more intensely so that while you're on the medication, especially the first couple of days of the medication or as you're at a higher dose of the medication, we don't have you actually like your, you know, your body's like speeding down the highway a bit undernourished and then we hit, you know, hit a wall of burnout on that part.

Side effects are really important to understand. Those are all the ones that will occur because of how the body works. I just want to be really clear.

I wish there was a different name because I don't see those as side effects. I see those as the effects of the medications. They're just the effects. That's going to happen.

Then there's this other world of side effects where Unfortunately, we don't have really good data in the studies about, is this a medication? Is this causal?

Is this correlation? But there are some things that, as I've been investigating, I find really interesting. So there was, of course, what some people have said is a really poor study on mice and looking at thyroid, and then looking at thyroid cancer.

Look, if you have thought, and also in individuals, if you are at risk for cancer in any capacity, what every medication and every supplement, every choice should be a part of a conversation with your practitioner.

If you've been through cancer treatment and we're reducing preventing recurrence, that's an important conversation. Nourishing your thyroid is really important, and oftentimes when we are under-resourced, we are under-resourcing our thyroid, so looking at thyroid health would be very important.

The one about making us go blind or looking at the stroke from an ocular nerve standpoint, I talked to a functional medicine practitioner who's a neuro-ophthalmologist, And her take was that the optic nerve in the individuals who developed optic nerve stroke was actually smaller.

Who is an ideal candidate

So I don't know, I don't understand all of this. I'm just like borrowing from what she explained to me. So is it a good idea if you're on this medication when you go to get your eye exam, like, you know, just number one, get eye exams, but when you get your eye exam, just to ask, you know, is my optic nerve like a normal size?

If it's a smaller one, like, That's a good conversation for you to have with whoever's prescribing your semi-glutide and have the conversation about, you know, how do we protect the nerve and is this a risk factor for you, you know, to be able to be informed and ask that question.

And then when we look at other factors, you know, where people have said, I mean, the one that kills me is like, you know, oh, well, this medication causes you to lose muscle.

And you're like, no, all of our choices either contribute to us making muscle or causing us to lose muscle. It can, if we are not absorbing protein, Or if we don't have the right amino acids in the right quantity, if we're not optimally resourced, then we may not make muscle despite even getting in protein or in that piece.

But protein is not the only thing that builds muscle. You have to turn off inflammation. You have to optimize recovery. You absolutely have to have optimal digestion, like all of these other pieces.

And I mean, and the type of exercise, right? So you're like sitting there and it's like, so if you are tight, so what becomes this perfect storm is if you go on the medication and you feel like, wow, I'm losing weight for the first time in my life and I don't have to exercise.

Okay, give yourself like three weeks and just enjoy that and then come back and be like, I actually do, you know, or see your skin get real flabby real fast, you know, on that part in places you don't want it to be.

Not that we really want flabby skin anywhere, but so, you know, you want to look at that. And then design a safe exercise program for optimizing muscle for making, and that's your fast twitch and your slow twitch muscles.

So as an example, if I'm somebody, um, and I work with trainers for this, cause that's not my, my skillset. But if I'm working with somebody and you know, this, this, this particular woman comes to mind and she, you know, she's had two or three bone breaks and we've worked a lot on bone health and yeah, so that was a big.

And I was like, all right, so one of the things that I want you to do is I don't want you wearing the weighted vest. The weighted vest was not a better choice for her, might be a better choice for somebody else on that part.

But we do have her, she's carrying weights around or she's carrying heavier things around in a safe way when she has her shoes on, in her house, on a pathway that she knows isn't obstructed.

And we go through and we give ideas for what are the things that we can be doing so that we can help her to build muscle. Now, I think when we look at these pieces of what's called effects and what are called side effects and what are things that are concerning, I think really important.

The final thing that I want to leave your listeners with this is to understand that we're just about, with the introduction of a triple agonist, we are just about to get out of the space where we're just replacing our own weight health hormones and we're into the place with medications coming out that are doing other things or that may not be a mimic or as we said biosimilar to what's in our own body.

That's really important because that says to me that that is going to require us to understand the effects of those medications through a different lens than than we've been able to with semi-glutide interzepatide.

So as Retro True tried, I can never pronounce it correctly as the R1 comes out. And as all these others come out, I think it's really, really important to talk to someone who understands how it works and then who also understands how your body works.

And that's how we create that winning protocol. So with these effects, the effects, the side effects, whatever you want to call them, with the GLP ones, they've been around a long time.

I think a lot of people think, oh, these are just on the market. They're brand new. They've only been around a few years. But they've been used for diabetes for a long time.

So we have a good sense of the long-term risk profile. Can you break a little bit of that down for us? So I agree and I disagree. So here's where I think, like, I think we can hit the middle ground.

So the first version, Lyraglutide, has been around, yes, as you said, it was an earlier medication, but it was a once a day shot. So the difference now is when we're taking something and it's driving us over the course of seven days at this higher amount, you know, it's not degrading for that longer period of time.

I think that is doing different things than we have. So I look then at semiglutide and terzepatide. And I also think that's why liraglutide started to have some weight health benefits, but it didn't really blow up in the way that semiglutide, you know, which became this unignorable, thank goodness, you know, like it has all these impacts.

So I think that some of those direct effects of how, like, when we're laying gastric emptying for seven days, that's problematic. That's why, like, they have you before a colonoscopy, two weeks before, you know, we want you off the medication or, you know, talk to your practitioner.

in that regard so that anesthesia can work appropriately. That's why if you're on one of these, I think in case of emergency information, that should be everywhere so that if you did, if you were rushed in somewhere and had to have surgery, they would understand that this is what's going on in your body and other pieces.

So I think it's really smart for us to not try to make people feel, and this isn't you, this is more what I'm deeming where people do it in a non, nuanced conversation.

I think this idea that, yes, the system for replacing these hormones and having them work has existed for a long time, but we're doing it much more intensely now.

And I think that is something why we're seeing some of these pieces. And then there's this whole other part, right, which is when you bring in weight, you bring in the psychological piece.

which I think is so that bariatrics to me was such an eye-opening experience on a variety of different ways. It really forced me here's somebody who like grew up with a belly like I was cute and then I was the fat kid and then I like had like trauma throughout my whole life of having this belly and what it meant to be overweight and be told I was totally healthy I just needed you know I was just I was the problem like I just needed to eat differently and do things differently.

And so there's trauma. There's a lot of trauma that builds in there. You may have made choices in your life in a different way, you know, and all of those things.

So with bariatrics, it was really interesting because we built a whole system around an individual when done better. I want to acknowledge you build a system around an individual that helps them navigate.

You know, we had groups getting together, we had conversations with coaches, we had conversations with social workers. Sometimes there was like really important like family and partner counseling because you know the whole relationship was like predicated on how someone eats or somebody seeing you as a fat person and like or as an obese person and now you weren't and what did that mean you know in your relationship etc.

And currently we're seeing that with the GLP-1's as well for relationships. The dynamics change profoundly. Profoundly, profoundly, yes. And food, so many of us carry acute trauma and also carry chronic trauma.

And the scars of those are in our vagus nerve, right? So it really, what it will often end up happening is it will actually caught like, if we don't acknowledge that, it can be very confrontational to us.

And I think that piece, when you don't have the support for that, that's also an issue. And so why do I bring that up? Because that wasn't a factor with Lyraglutide.

Like anyone who has ever battled diabetes, like I'm talking really about type 2 diabetes here, acknowledging just a different etiology and issues with type 1 diabetes.

But with type 2 diabetes, I do not want to say that there's no trauma or there's not, you know, etc. But in a type 2 diabetic who wasn't somebody who was ever dealing with their weight, what they perceived as their weight issues versus a type 2 diabetic and or someone who was just dealing with their weight issues, we have to really acknowledge that the But in many instances, it might take a year or two for you to even feel comfortable.

It might take 15 for you to feel comfortable with your body. You know, I have a patient who has lost a considerable amount of weight and she is getting attention publicly.

somebody stopped her the other day and was like just and was speaking to her and was like you're such a beautiful woman and this she was abused as a child and it was a very you know it was this was when she was a young teenager and this was a huge part of you know and I get tears my like a huge part of all of this she was so uncomfortable in that situation and she's like and my go-to used to be to like run into the coffee shop and just eat to make myself calm She sat in her car and cried for an hour.

And thank God has an amazing support system that, you know, we've worked, we've all collaborated to put in place. Um, but that was like, and that poor man didn't realize, like he was like hitting on her.

Like he was like, this is, you know, and she wants a relationship so desperate, you know, and so she's like, I'm so broken. This is never. And I was like, Hey, I was like baby steps.

Like this is just, this is a situation. So like, how do we want to handle, you know, in the future, what, you know, these sorts of things. And so I think that that's where, like, to me, those are, like, unfortunately, the side effects and the effects that actually aren't getting enough of the attention that I think really need that attention.

Yeah. I've talked to countless patients where that weight is like an extra layer of protection against the world, right? Yeah, totally. They're extremely entitled to a trauma.

Totally. I want you to describe the ideal patient over 65. Yeah. This is really about aging well. So a patient who is over 65 considering this, who is the ideal patient?

Yeah. If you're considering it, I think you're an ideal patient. Here's the thing. That means I want you to have the conversation because rooted in the conversation helps you and your practitioner understand something that is a

goal for you.

What is bothering you? How do you not feel aligned in your own body? Look, at 65, we're here to fulfill our life's purpose. Like, we're on the clock. I don't know if we have five years.

I don't know if we have 35 years. I don't know if we have another 65 years. But any time, you know, in that regard. But I think the important thing for anyone, if they are considering this, is to really look at it, all of the considerations.

So, we talked about your whole medical history is going to be important because we want to optimize for that. We also need to have a financial conversation.

These are not easy financial times and they're getting worse, like in terms of what's both not just the cost of the medication, which is an ongoing cost, potentially the cost of your practitioner if some of your coverage or things like that is going away.

And what we don't want to do is you don't want to start off and say, I'm real gung-ho and I can pay for this for three months. I want to know what's your plan for the next two years to pay for what you need to do for weight health optimization in that space.

And sometimes, and I've had this very real conversation with clients, sometimes it means we are only going to use a low dose of this. Even though you probably need and could benefit from going up higher, I want to spread it out for as long as I have it available.

Assessment, resources, and closing

in that regard. So I think that it's less about if you feel, if you are interested, and by the way, that's what we do, like come have a conversation with us.

We don't charge for it. You're welcome to come over. I think any good practitioner is going to have a conversation with you about what, are we a good fit?

Is this a good fit from that conversation standpoint? And I think in that way, it will be really helpful for you to determine what is like, it's less about are you an ideal candidate for this tool, but more about like, okay, if these are your goals, then what's the ideal or what's the personalized plan for you?

So I'm pivoting your conversation a little bit intentionally on that one. And in that conversation, hopefully you're assessing what your weight health hormones look like or in that assessment and then that workout.

And what does that look like? Is there a list of things we might ask our provider to test? Yes. So yes and no. It's a five-part. I've created the first-ever weight health hormone assessment because it didn't exist.

I want to be real clear, everybody. It is a clinical tool. It is not this thing that like you go on and you find out, oh, I'm a lion, or I'm a tiger, or I'm a bear, you know, oh my, like that kind of thing.

It is a tool, and it's a clinical tool, so it's going to ask you questions about your lived experience with food, as we've talked about. It is going to ask about labs, so if you don't have some of the labs, we're going to need to get those.

Weight, composition, breathing, digestion, hydration. that might feel super overwhelming, especially when I send you a couple PDFs and I tell you here's how you do it and you're at home and I want you to lay down and breathe and do this part.

Okay, right from the get-go, work with your practitioner to do that. That's why I've made it free to practitioners, I've made it free to individuals. I want us to be able to do this though because we need to know not just are we optimal or suboptimal, but within suboptimal, what type are we?

And then when we actually do this assessment ourselves, we get to see where the suboptimization is occurring. That allows us to be much more efficient in honing in on where we need to focus, but also make sure that we want to protect what's already working better so that we don't come in and we don't like blow everything up and are like, oh, you know, you really needed to work on your digestion.

But in working on your digestion, we actually messed up, you know, something about, you know, X, Y, or Z over here. So again, clinical tool, something you can do on your own, something you can do with a practitioner.

Ashley, this has been such an eye-opening conversation, such an exciting conversation. I just want to also mention, you know, I harp on sleep apnea. And ZepPound, one of the tris-apetide medications, is on label for sleep apnea.

And that is, I mean, one of the direct connections to our weight and these weight-holding hormones and our brain. and this prevention and even the reversal of Alzheimer's as we age, getting the oxygen to our brain at night.

So there are so many potentials for the use of this. I think as you mentioned, this is a phenomenal tool to have in our tool belt to really evaluate, is this one appropriate for me?

But it opens up this world of possibility for people who are overweight, who have sleep apnea, who have elevated blood sugar, blood pressure, you know, inflammation, of course.

And this has been a phenomenal conversation about that. And I know that there are going to be people who want to learn more. I can't wait to get a copy of your book, The Best Shot.

I'm really looking forward to that. Congratulations. Thank you. And where can people between now and when your book comes out? It's available for pre-order now, right now, wherever books are But I had to do this.

My team wasn't so happy. So everybody can connect with me at the Better Nutrition program. That's my company, and we've got your best shot on there. But I was like, you guys, I can't have somebody pre-order a weight health book today because I've gotten them excited.

They've heard about this, et cetera, and then be like, I'm just going to wait till January. Even if it's December 27th, I don't want you waiting. So we created something called the jump start, not the jump shot.

the jumpstart and that includes the book and then it has about four or five live sessions to help you get started. You can attend those live depending on where we are in the year or you can get the recordings of those and so then your book will arrive and then on January 12th if you choose to join live or if you choose to do it at your own pace we also have a 30-day program so that instead of doing some like drama diet that like makes your weight health worse you know later on in the year You actually have a program that you can, it goes through the book and it, you know, deep dives, double clicks on things.

It has great experts, you know, in collaboration. And so we've got that information in there. So your purchase expands into a world of possibilities and included in the book for anyone who does pre-order.

is also access to our health coaches. The reason that we did that is I want you, when you are doing this and have a question about what is better for you, I want you to be able to ask that.

Health coaches are not clinicians. They're not going to turn around and say, you should do X amount of this or do this part. They are going to help you, though, use the resources that are available or direct you to a clinician in the event that your question really should be answered by a clinician to help you optimize weight health.

At the Better Nutrition Program, we exist for a sole purpose and we are the best nutritionists for weight health. This is what our focus is on and I want to make sure that anyone who is looking for that feels like they have that to then collaborate with their naturopath, to collaborate with their surgeon, to collaborate with their trainer, whatever in that space.

If you already have access to an amazing one, great, then use the resources and you're off to the races there too. phenomenal. Ashley, this has been such a wonderful conversation.

I feel so privileged. I know that you are so busy sort of on the as you approach book launch. So thank you for choosing to spend some time with us and really enlighten our audience around how to use these tools as we age.

Thanks for having me. Thank you so much for listening to the Think Well, Age Well podcast. If you enjoyed today's conversation, please take a moment to subscribe, leave a review, and share this episode with someone you care about.

It's one of the best ways to help others discover tools and inspiration for aging well. To stay connected, get bonus resources and never miss an episode, head over to drheathersanderson.com and join my email list.

Until next time, keep thinking well and aging on purpose.