Are Your Hormones Sabotaging Your Health? The Truth About Bioidentical Pellets Transcript

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Introduction to Hormone Optimization

The biggest thing, and this is why I hone in on our trainings, you've seen we spend the first five hours reviewing literature, looking at the studies on how estrogens, especially, but estrogen and testosterone, protect the brain from Alzheimer's disease, dementia, strokes, osteoporosis, cardiovascular disease breast cancer, prostate cancer.

I mean, when a man's testosterone is low, his prostate risk goes up exponentially. Right. His risk up goes exponentially, so I think that still the biggest thing is clinicians can't make this connection that hormones aren't just for reproductive health.

They are literally for every single body system. Like I said earlier, if you have a hormone receptor sitting on a cardiac cell, a brain cell. You know, you know a heart cell a, brain, cell bone cell skin cell that means that hormone has a job to do in that cell Welcome to the Functional Edge.

I'm Dr. Julia Ward, and this is where science meets real-world strategies for living healthier, sharper and stronger. From uncovering hidden environmental toxins to unlocking peak performance and mental clarity, we cover it all.

Ready to take control of your health and thrive? Let's dive in. Welcome to the Functional Edge podcast. I'm your host, Dr. Julia Ward, medical director and founder of Balanced Body Function Medicine.

Today, we're honored to welcome Dr Terry Denai to this show. Dr Denia is a nurse practitioner and Founder of Avexapel and a nationally recognized leader in the field of hormone optimization and regenerative medicine.

Through her innovative pellet therapy protocols, she's helped thousands of patients restore balance, energy and long-term wellness. In this episode, Dr.

Denye shares her expertise on bioidentical hormone replacement therapy, including the science behind hormone pellets, how to individualize treatment, and why hormone optimization is so much more than symptom relief.

Dr. Danaiu2019s Path to Integrative Care

So whether you're navigating perimenopause, andropause or simply want to get vitality with age, this is a conversation you won't want miss. So stay tuned for expert insights that will help you take control of your hormonal health and thrive at every stage of life.

I do this all day. Great, great. Well, Dr. Danai, you've had an incredible journey from emergency medicine to founding of XCS Health Solutions. What inspired your shift towards integrative and hormone-focused care?

Yeah. So, you know, my background, like you said, is in emergency medicine. And I also worked simultaneously for a big hospitalist group in the Dallas-Fort Worth Metroplex at a Big Level 2 Trauma Center and great fun stuff, learned a lot, helped so many people.

But I think where we fall short and where I really saw how conventional allopathic medicine falls short was in the hospitalist side. Emergency medicine is fun.

You can stabilize disease, get them either out, you know, home or up into the realized, and I started realizing this over and over early on, but I was helpless to do anything about it, that it just seemed like we were really just band-aiding a lot of chronic diseases that have prevention at the root cause and the route of treatment, which really should be prevention.

And we just don't learn how to prevention well in our training, as you know, in this country, whether you're a medical doctor or a nurse practitioner or PA doesn't matter.

We're kind of focused on this allopathic model of you have a symptom, you treat the symptom. But we're not really doing a whole lot to manage disease and prevent disease.

So it kind sparked my interest to really start seeking answers. And I found myself at actually an A4M conference, World Congress on Anti-Aging Medicine, about 16, 17 years ago.

It might have been 2008, I think, January. was just listening to a longevity talk by a doctor and her name, I can't remember her, name but she wrote a book you could find her probably called Awakening Athena.

And she was telling stories about just profound life change and being able to get patients off medications like like antidepressants and blood pressure medications and even in many cases over the course of time.

you know, diabetes medications and sleep medications, and anxiety medications. And I just thought, wow, this is really kind of what is needed. But what surprised me is it was a hormone talk, you now?

And, I was just like, wait a minute, hormones, is that just for, would we start having hot flashes or men start becoming grumpy old men, kind-of thing in our 50s?

But I kept digging and yes, these, this hormone conference was focused on postmenopausal women. But what I found as I. Kept learning and I started learning about testosterone specifically that these deficiencies start way younger than our fifties.

for women and even men in many cases. And now I think even younger and younger, obviously, as you know, because of just our food, our dietary practices and things in this country.

So it started me on this journey and I transitioned my little 10 by 10 aesthetic practice. I was just in a room and moved and joined another practitioner and started doing hormone optimization.

about a year later, I learned how to do hormone pellet therapy and that was just a game changer and it just has exploded. And then, you know, now as, the rest, as they say, is history.

I've really been able to take a lot of that knowledge and, lectures I'd done and teachings that I have done, and wrote a book and just really educate because there's still so much misinformation.

So long answer to your question, but sorry. That's great. That is great! So you developed the Avexapel method. What sets this approach apart from other pellet insertion techniques?

Yeah. So I trained about in 2009, so 16 years ago with, you know, who we called the godfather of hormone pellet therapy. That was Dr. Gino Tutera. He's since passed away, but he really was a pioneer in this space.

And what I found is the protocols that I learned from him worked beautifully, not for everyone. What really bothered me was the outlier patients that, you know, it seemed to either not work, I'm gonna air quote that because you can get fuel in the tank, but why isn't getting in cells?

Why isn' it relieving symptoms? What's going on with these people that it's not working? So I spent the better part of the last decade really just trial and error, going to more functional integrative medicine conferences, really understanding the role of hormone receptor activity and the gut.

What Hormone Pellets Are and How They Work

And there's so many nuances that go into hormone optimization It's, you know, again, I learned even though it's pellet therapy and it was a pioneering, modality.

I still learned in an allopathic way because what they were teaching me was, oh, your patients will have all these symptoms and here's hormone pellets that can address those symptoms.

But there's a lot of other things that, just kind of weren't right. just trial and error and learning and adding things. You know, I think we've, and we're still learning, changing, adding.

We've done things to perfect the insertion technique. I'm limited to every quarter. I can update my lecture slides, but we really always like to know what's latest and greatest.

What's new in the hormone world because it's fluid. It's changing. There's more and more information coming out. I have lectures and I'm teaching things that I didn't learn 16 years ago or 10 years and so forth.

So it's constantly evolving. I think that's the biggest thing that sets us apart is we're really committed to maintaining that evolution and making it better.

That's awesome. Well, for listeners who may be unfamiliar, can you explain what hormone pellet therapy is and how it works in the body? Yeah, so hormone pellets have been around since the 1930s and it's bioidentical hormones.

So bio identical just means your body recognizes it as bio equivalent to your hormone hormone that your five ring carbon structure of the yam plant is identical to human hormone.

And so when compounded and when they make a powder, they create a power, and that is what most, we used to use soy and or yin, but now it's just yan. We don't use so anymore.

But bio-dentical hormones are created at the base from this type of source. And so when, you know, I like to just backing it up to bioidentical hormones.

I liked to give the analogy of a key and a lock and the hormone, the right hormone the bio identical hormone. If you've ever had a Key that fits in a Lock and doesn't really turn the lock all the way, You can liken that to a synthetic hormone but a bio-identic hormone hits that receptor and unlocks that lock and allows all of the processes that that hormone is supposed to the action that the hormone supposed have in that cell to happen.

And that's a really important distinction because even the word hormone means impel to urge to move on to cause an activity. So if there's a hormone receptor on a cell, you know that there is a hormones that is supposed to provide an action in that cell.

So hormone pellets were discovered and really utilized in this country to a great deal and were being studied in the mid-30s in women who had had hysterectomies with their ovaries removed.

And it worked great. They loved it. Estrogen, they got estrogen levels up to premenopausal levels. And then in the 40s is when we discovered women, our ovaries actually make testosterone and it's a vital hormone.

It's an incredible hormone, as you know, for vitality, moods, brain function. My doctoral work was on depression and androgens, testosterone efficiency in women.

So that was really a game changer for women at that time. And then Premarin came on market in the mid 40s. And by and large, this magical pill that really changed lives for many, many women became the mainstay of hormone therapy in our country.

Uh, and so hormone pellets as an option, as a modality really kind of fell by the wayside and then kind made a resurgence back in 80s and 90s, especially in a couple of decades here in the States.

So they've been around a long time. The difference and why I love them over the other modalities besides the fact they're bioidentical is you can really dial in on the dosing.

And the biggest thing is, you have that hormone available because these little tiny pellets are placed. the skin and it slowly is releasing that hormone into the system.

You have your levels up 24 seven for a good three to five months rather than, you know, I put a patch on it lasts for three days or I take a pill and at last for just that day and you're on this roller coaster or in the case of men, get a shot of testosterone and I really spike up high for few days and then I crash.

So it takes away this Roller coaster effect of the other modalities that are available. Yeah, yeah. And just so many of my patients, new patients come in and they have such fear or misinformation about hormones in general.

Like, isn't this going to cause cancer? So I have to kind of put it in context that a lot of those relationships to cancer were really done using the synthetic hormones, like the Probera.

Yeah, and even, you know, the more recent data even shows that the synthetic estrogen protects women against breast cancer and death from breast, cancer, which isn't what we would want to use.

But yeah, now the data that was reported around breast. Cancer obviously was skewed and really created a lot of fear. Unfortunately, it was actually the Synthetic Progestin in the WHO that caused all of the negative effects of that hormone.

And so, yeah. It's created. A lot. Of unfounded fear, Yeah, yeah, absolutely. Well, who would you say would be an ideal candidate for pellet therapy and who might not be a good fit?

Well you know, really for females, females across the age span would a candidate of pellets therapy if they're symptomatic. And even as young as in women in their 20s, if their on birth control pills, it's blocking their testosterone production.

So really, for women it can be any female that's suffering from depression, moods, anxiety, irritability, low sex drive, brain fog, difficulty sleeping at night, fatigue, those kinds of things.

Those are pretty global testosterone deficiency symptoms.

Who Benefits from Pellet Therapy

And then, of course, as women transition through the hormone changes through life, you know, and we start having estrogen fluctuations typically in our late 40s, early 50s.

And then that would be an opportunity to add in estrogen or estradiol mix. So that's for females and really males, same thing. You know honestly, we're seeing younger and younger males now.

I typically don't like to give testosterone replacement to young males that are still reproducing. because it can suppress your sperm production quite significantly.

And so we really can, a lot of times in these young guys, we can work on their diet, get them some certain nutrients, nutrients supplements, things like that.

They can kind of help turn that around, but that takes lifestyle changes and that's hard for a lotta people to do. But really the only absolute contraindication for estrogen therapy in a female would be active breast cancer.

And that's just because it's not standard of care. And really they're in the only. contraindication for testosterone pellet therapy would be in a male with an active prostate cancer that's being treated.

Otherwise, there really is no contra indication because all of the side effects that the negatives that you read about with hormones are typically in oral form, which have a much higher side effect profile.

Right, right. And so how does pellete therapy compare to other forms of bioidentical hormone replacement like creams, patches, injections? Yeah, so they're all just depends on the patient.

You know, we have used all of them in our practice. We have a handful of patients that use creams, We've have handfuls of patient that uses patches and males that used shots and it just depend on patient maybe, you know that's just their preferred modality for whatever reason.

But they are all good. I think the only hormone that I would never prescribe to a patient would be a synthetic progestin. testosterone, a progestin oral.

I wouldn't probably first line, if a patient didn't want hormone pellets, I would probably use oral 17 beta estradiol, which is available commercially and is very well studied and very safe and efficacious.

Slight increased risk in certain populations that it can increase clotting risk. But there's patches available commercially that are bioidentical. There's oral bio identical progesterone available.

Creams do okay. I use a lot of creams in women that maybe are breast cancer survivors and it's really great for vaginal discomfort and things that happen locally in the vaginoblader area that because of low estrogen and maybe they can't get estrogen replacement because they're in middle of a breast cancer treatment.

So creams work beautifully for that. We use a lot of creams of testosterone for women for libido when applied vaginally that works really great for Libido.

There's all different kinds of modalities. I think about I would say 95% of our patients, we see about a thousand hormone pellet patients a month. get hormone pellets.

They're convenient. You know, they don't have to worry about it for three to five, sometimes six months, depending on the patient. And so there's all kinds of different modalities, but it just depends on goals for the patients, the goals of therapy.

Yeah, I always like to give my patients my perspective of when I went into changes hormonally, you know, and I didn't, some women don't ever have hot flashes and that doesn't necessarily mean that you're not going through menopause.

So I never really had hot flashes, but what I did have was overwhelming fatigue. And the fatigue was not alleviated by hormonal cream. Like the cream, I couldn't tell if it was on or off.

It didn't make a bit of difference. But the minute I got a pellet, or I'd say about a week after I it was night and day different. It was all of a sudden, oh, now I feel like myself again.

And it just pushing that testosterone to what we consider super physiologic levels. But that's where I felt really good. That's when I started having more easier time building muscle and decreased inflammation, better sleep, all this kind of stuff.

So what do you say to concerns about getting these testosterone levels to the superphysiologic level? Great question. I wrote a white paper addressing this very thing.

And I'll tell you who has the best paper is Dr. Rebecca Glazier, G-L-A-S-E-R. You can Google her. All of her papers are, for your audience, are available on her website.

She has a paper that is called Superphyisiologic levels for a physiologic effect. And she explains why women, as we age, need higher serum or blood levels of testosterone to cause an effect to alleviate our symptoms.

She explains it really beautifully. There's a lot of things that happen as age. Our hormone receptor activity becomes desensitized. Hormone metabolism, gut health plays a big role in this whole conversation as well.

Some women and some people, women, men and women have really high what we call sex hormone binding globulin, which is a protein that binds up your testosterone that's available.

And so all of those factors combined, and this is where I have to really educate patients and other clinicians, that blood level on your lab slip really doesn't mean anything because what causes the symptom relief and what exerts the action at the cellular level is not measurable.

The only way to measure that is by the patient going, my symptoms are gone. I feel great. And so 300 is my number or whatever it is. Yeah. So this is a big area of education.

a lot of patients and doctors that are so confused about it. And when you really look at the literature, it speaks to over and over. Our lab, the way we test for testosterone levels, especially in females, is very, there's not a good methodology that's accurate and reproducible.

Comparing Pellets to Other Hormone Options

quit, you know, let's put it this way. In the OBGYN world, in the gynecology world when a woman comes in and complains of hot flashes and symptoms of menopause, there is no gynaecologist that I've ever met that says, let's check your blood levels first and let us put you on this medication to address your symptoms.

Their blood level is not even checked. If you haven't had periods in a year, you're having these symptoms, oh, your menopause, here's your estrogen. They don't follow and track that.

So why are we doing that with testosterone? We see that you have a relative androgen deficiency. You can see it with a free testosterone level. And then we treat you and when your symptoms are relieved, we shouldn't even be looking at it again after that.

But you know, were kind of hung up on this lab thing and it's a sticky wicket. Yeah, yeah, absolutely. What kinds of transformations do you commonly see in patients after beginning pellet therapy?

And are there certain symptoms or conditions that respond especially well? Yeah. So I will say, again, you know, it's why I chose it for my doctoral research is depression in women.

especially after that second baby, women will complain of just not only fatigue and all of the other things, but really the blues, the blahs for no reason.

It really impacts relationships, it impacts marriages. And what I was noticing early on after I started doing pellet therapy in my clinic was that women were able to come off their antidepressants because all the sudden those symptoms were being relieved and that antidepressants were causing side effects that we were trying to get rid of like low libido, weight gain.

These are the top two side-effects of antidespressant. So I was able to transition the majority of my patients off of their antidepressants and then I began to research it because I saw it experientially in my clinic and I thought, okay, there's got to be some science behind this and of course there was and wrote a paper about it.

But that is a big one profoundly is moods, especially in women that are in their 40s. because in our 40s, not only is our testosterone low, but progesterone starts to get low.

And that's when we really see, I think our forties is the female midlife crisis age. If there is such a thing, it kind of hits in her fifties. It really impacts relationships and marriages.

I'm really passionate about that. So that is a big one. But sleep, of course, and libido. Of course women lose libidio. Men don't really ever lose desire so much as they lose ability.

But women actually lose desires significantly and that impacts relationships. So libado, energy, brain function.

moods. Those are kind of the top four for females, I would say.

And for men, you know, kind energy and brain function also. The biggest thing men complain of in this, andropause timeframe is that kind the desire to do the things they once loved is just meh.

Like maybe it's golfing, maybe its fishing, whatever it is. And then of course, as they lose testosterone, they get sarcopenic, their muscles kind of waste and their belly gets bigger.

You have the typical midlife looking guy and that can actually be fully reversed as you know with testosterone. Yeah, absolutely. I want to say one thing about this key that you're saying this.

I have had patients on every modality of testosterone that there is available. And I will say hands down, hormone pellet therapy gives the best symptom relief, because I believe, of the 24-7 availability in the system.

There's not a spike in it and a drop. Yes, that roller coaster that people experience with other modalities really isn't you know, you feel good for a few hours or if you get shot.

It's just not as ideal. You don't get that even distribution. Yeah, traveling got to carry it with you and all these. What are some potential side effects patients should be aware of with pellet therapy?

The side effects are for testosterone are typically women experience this are nuisance side-effects. There are no side affects of hormone health everywhere that are irreversible.

They're just, we are not getting levels. It's not a lot of mistakes that people make as they take the side effect profile of anabolic steroids with mass eulinization and apply it to bioidentical testosterone.

And it's the same. Right. So you don't have the hair loss. Testosterone is actually a metabolic hormone. It causes hair growth. In fact, that's probably the number one nuisance side effect is it causes her growth in places a lot of women don' want it.

Especially if you have dark hair like me, blonde like you, you know, really that problem as much. But as dark haired ladies, we definitely dark-haired ethnicities, We see that more.

so it's a nuisance side-effect, but it is not really a game changer because you feel so good. You're like, I'll just get lasered or whatever. So that's the main one for testosterone.

And, you know, for estrogen, it's really, I just don't see a lot of side effects unless women aren't getting enough progesterone or then absorbing their pro testosterone, they could have some breakthrough bleeding that is manageable, obviously, with the right intervention.

So the side effect profiles are dose adjustable. use in side effects that can be fully mitigated with just adjusting doses. And I'll say too, one of the things that we teach, which you know is just the art of hormone pellet therapy and there is an art to it.

There's a science for sure and it's very backed by science. But there's an art to it and starting low and going slow and adding more as the patient needs it is a really good approach.

And I think the problem is there are so many people that just go do an online pellet training or maybe they do a one-day certification where they're just kind of learning how to put it in.

It's more than just a procedure, as you know. There's a lot of nuances that go into the dosing.

Benefits, Side Effects, and Dosing Nuances

And so I think when you talk about side effects in our clinic, we just we don't see a lot because we're experienced

and we know how to do it. But there's a lotta clinicians out there that don' really understand the nuances and more side-effects in that population.

Yeah, definitely. Yeah. We get the same concerns and especially if I get somebody who's been pelleted somewhere else and maybe had a bad experience because they were overdosed with stuff and it caused some side effects.

And again, not permanent, but it can be scary and definitely annoying. But yeah, that's the biggest thing we see is patients coming to us from maybe another clinician that or maybe they did get good training and they only do two or three or five pellet procedures a month so they don't have the experience to really understand the nuances of it.

I always tell my patients that it's easier to pellete women, but it is harder to dose them. It's harder to pellet men, but it's easier to dose them because if I do too much on a man, it is not as big of a deal.

They are just not going to have much side effects. I think, too, with the pellets that we use, which have made a big difference because I've used pellet in the past that had a really rapid rise and a rapid fall, you saw a lot more side effects.

So one of the things that really worked hard on and worked with a pharmacy to improve is this side effect profile. One of the biggest ways we did that is to create a pellet with an ingredient in it that kind of almost acts like a time release.

It slows down the peak in the fall. You can slow down that peak, you mitigate a lot of side effects because a lotta the side-effects for men, especially if they're on shots, come from that rapid peak.

So they get higher estrogen levels and they higher red blood cells and their hemoglobin hematocrit, their blood gets thicker. But you don't see that with a slower rise and a slow fall, And I think that's the other thing, we see a lot more side effect profiles in patients that maybe have come from another pellet provider that uses a pellete from a pharmacy that has that rapid rise and that hormone dumping into the system.

It's not just not all hormone pellet practitioners are created equal, but not a hormone. Pellets are creating equal. That's the key thing for your listeners to understand.

Yeah. And I have to say, I absolutely love the pellets from Avexapel because I think they are just, they're great quality. I love The Triumph Sinalone coating on those.

and that's been a real game changer because before I was using your pelletes, a lot of my male pellete would reject. You know, there was always a handful of them where pellets would just kind of work their way out.

But with the triamcinolone-coated ones, which is a steroid, it just decreases that inflammation. And I haven't had any reject. So it's, yeah. Yeah, It's been a game changer.

They actually granulate and mix in the trimcinoline with whole pellet. It is not only on the outside, but as it dissolves, low in anti-inflammatory state in the bed where that pellet is.

And so it has been a game changer. I remember way back in a day, I would have guys that for no reason just, you know, well, my pellets are popping out again, it's so frustrating and it keeps them from staying on the therapy.

But this has a been game-changer that try to sit alone infused into the pellete. It's been amazing. Yeah, and I think, I haven't found any other pharmacies that do the same thing.

No, our pharmacy has a patent on that pellet, so no one else can do it. Okay, awesome. Yeah. So the patent wears out. Plus, there are pharmacys that have tried to figure out how to do their own formulation, but let me tell you, It took us two years to get this thing right.

I mean, it takes a long time to figure out the nuances of granulating a pellet and getting it just right, and then you have to meet certain specs. So, you know, this probably might be on your questions coming up, but everybody says, oh, are the pellets FDA approved?

Well, the making process because testosterone as a controlled substance is highly FDA regulated. And for males, pellet therapy is FDA approved. Testipel is a pellete that's FDA-approved.

But for females, it's considered off-label. There are such tight controls that the FDA requires on your granulation of trimethylamine. That is really hard to do.

You can ask our pharmacy lab techs and the people that have worked on this for so many years, but they have to maintain very narrow percentages, and it's tough to do.

So I think that's one of the biggest reasons why a lot of pharmacies haven't really been able to figure it out. I'm gonna add some brilliant chemists in there.

Yeah, yeah, that makes sense. Do you approach pellet therapy in perimenopausal women versus menoposal woman slightly differently? Yeah. It's a mentor of mine used to call it no man's land because it can be all over the place for a minute to minute, day to day, and it is a rough time for women because that's the time, for woman, as you know, or your listeners, when estrogen, it fluctuates.

And the fluctuation is what causes the misery, right? So things can happening like moods and heart palpitations and hot flashes and you know, it's just all over the place.

And so, but the problem is, until you go 12 months without a menstrual cycle, you really can't get a full dose of estrogen. But with pellets, what we have is a perimenopausal dose, of estrogene that is very low dose estrogen that you can put in with your testosterone pellet that keeps kind of a basal, like a baseline of Estrogen.

So when a woman's fluctuating and her levels dip below, which would have caused those symptoms, she's got that kind that's about a quarter full always, so she doesn't run out of estrogen gas, right?

So that is just a game changer. I'll tell you, I'm 57. And I went through this nine years ago, and I kind of at first, it didn't clue into me what was happening.

But I started thinking, wait a minute, my menstrual cycles have been really irregular. And that's the first clue for women, your menstrual cycles will go from every month regular to you skip a month, you skipped two months, to skip three months and then you're having them every months again.

And it can last from up to eight years, like two to 8 years. It can be a pretty big chunk of time. Most women it lasts two or three years on average. But when I finally figured it out and got that perimenopausal dose of estrogen, wow, it was like the lights came on.

I thought, now I understand what my patients are talking about when they say, you know, I felt like I was walking around in a fog and all of a sudden it's like, oh, can see.

Yeah, yeah. Perthin likes me again. Are there complementary therapies or lifestyle interventions that you recommend alongside pellet therapy to maximize results?

For sure, I think the number one thing is the gut and the whole conversation of gut dysbiosis, meaning bad bacteria overgrowth in the cut. And, you know, there's, in fact, writing, working with an endocrinologist right now that has written the Gut Happy Hormones book, and she's going to be releasing it in fall.

But there is so much interplay between the guts microbiome and brain and endocrine system. We're calling now the gut its own, its, it's own endocrine organ.

Perimenopause, Gut Health, and Supporting Therapies

So if you're not paying attention to what, I mean, Hippocrates said it centuries ago, you know, what's all disease begins in the, and it really is true.

And I think we're just now starting to get mainstream about this gut health thing. But the number one thing I can do because, we are, toxic overloaded, just we can't help it.

If you are breathing, living, walking human, just toxic. And so the best thing we can do is give our bodies the support that it needs. Our food is very nutrient deficient in this country, even just the soil that its grown in.

So unfortunately, we do have to supplement with key things that optimize hormones like good health probiotics, because when the bad bacteria in your gut overgrows, it impacts your hormone metabolism and can increase the retention of more cancer-causing hormone metabolites.

We don't want that. Yeah. Also diandlmethane, which is what's found in cruciferous vegetables, helps push our estrogen metabolism down a healthy metabolism pathway.

Vitamin D plays a huge role in hormone receptor activity. Iodine plays a huge role in fire reproduction and selenium for Hashimoto's. And so, you know, those are kind of the big ones.

Then we developed a hormone metabolism kind-of supplement that really helps with your free testosterone levels. things like that, but you have to pay attention and get some key nutrients to supplement to help your hormone optimization.

And then you got to take care of that gut. If I had it all my way, I would just, you know, tell patients, if you just not eat anything that opens in a package, as much as possible.

I mean, just cutting that one thing out, You'll be amazed at the inflammation that comes down in your body, But it plays a role. The inflammation plays huge role in this whole conversation.

I think that's one of the biggest things that I've learned over my years of doing pellet therapy is that the very few percentage of women that come back and say, I didn't feel any different after a pellete.

And I know that those are the ones that we didn' address some source of inflammation usually coming from the gut. Yeah, and then we have to go back to say, well, what are we missing?

Because there's obviously some inflammation that's not allowing you to feel the benefits of these hormones. Yeah because when you have an inflamed gut, lipopolysaccharides, it causes brain inflammation and you're depressed and your moody and can't think.

So all the symptoms that I'm trying to fix with the hormones, you can really tell because you've got another root cause. You had two root causes. I fixed one with hormones but we've gotta fix the gut.

It's just like if you're sick with a virus or a bacterial infection or something, you are not going to feel the benefits of the pellets either because your body is fighting off that inflammation.

So you've trained thousands of practitioners. What are the most common mistakes or misconceptions you see amongst clinicians just starting out with pellet therapy?

You know, I think the biggest mistake that I see new clinicians that come and spend two days at our training. And we, we have just developed so much to help clinicians stay.

We have a forum for these clinicians to ask questions and stay engaged. I mean, the big mistake is the ones that comes to training and don't go back and start doing it because you have to actually start.

Doing this therapy so you can become proficient and good at it. And so that's the biggest mistake. But besides that, I think the other one is implementing bits and pieces of the method.

In other words, maybe they'll just do pellets, but they don't really want to mess with supplements and they didn't care about the gut. Well, okay, you're going to help about 40% of your patients feel better for a little while.

But the other 60% need this extra help. So that is a big mistake I see clinicians make. That's really probably the biggest one. And just again, not doing it, because it takes practice.

You gotta get in and do something to get good at it. Learn how to ski. Don't go ski once and then expect great at if you do it once a year. you gotta practice and that's how you learn.

Everything I teach, everything I train on is what my patients taught me throughout the years. And that's how you learn stuff. So in your book, Hormone Havoc, you aim to educate both patients and providers.

What do you think is still misunderstood about hormone health in mainstream medicine? It's the allopathic model. I think the number one thing is when I say allopathy, just for your listeners, it's that the training that we all got to give a medication to address a symptom The biggest thing, and this is why I hone in on our trainings, you've seen we spend the first five hours reviewing literature, looking at the studies on how estrogens, especially, but estrogen and testosterone, protect the brain from Alzheimer's disease, dementia, strokes, osteoporosis, cardiovascular disease.

Breast cancer, prostate cancer. I mean, when a man's testosterone is low, his prostate risk goes up exponentially. Right. So I think that still the biggest thing is clinicians can't make this connection that hormones aren't just for reproductive health.

They are literally for every single body system. Like I said earlier, if you have a hormone receptor sitting on a cardiac cell, a brain cell you know a heart cell a, brain, cell bone cell skin cell that means that hormone has a job to do in that cell so we have to kind of get away from this oh it's just for hot flashes and libido and directing all funds to men and realize that we're really preventing chronic disease.

And the earlier you can start really looking at this, the better. I mean, I'm seeing young guys, you know, twenties and thirties with very low testosterone has everything to do with our diet.

diet, the toxins in our environment, and head trauma. Yeah, I didn't realize this until I did a course looking at this, but, you know, head, trauma really affects your hormone production.

And so, a lot of our veterans who come back with blast injuries and such, they are actually afraid of really low testosterone and maybe they're having behavioral changes, anger outbursts, because their testosterone is just in the toilet.

Can I tell you a story about that? Yes, please. Yeah. So I have, I had a patient who came to me and her husband was a vet, he was, a paratrooper. He jumped out of, jumped outta helicopters.

And she goes, you know, do you think my husband, like he has a lot of these symptoms. I said, well, yeah, we should get his testosterone checked. She goes well he goes to the VA every month he's on disability for his.

depression and this that and the other, you know, I think they would have tested that. And I said, probably not. Unfortunately, our veterans get the worst care and I'm working hard to change that actually.

But so anyway, she brought him in and. This guy's testosterone was 19. He had hit his head. I say, have you ever had a traumatic brain injury?

Training Clinicians and Correcting Hormone Misconceptions

He goes, how many have I had? It should be. Yeah. So, I mean, it was amazing. This guy had such debilitating

depression, he was honorably discharged from the military.

And we were able to reverse that depression with hormone optimization and hormone pellet therapy within six months. actually he really started feeling the benefits earlier than that and that that's just a huge example and I love that you said head injuries because here in the south where we got all these young kids getting banged up with football you know in especially high school football here.

In in Texas to see this a lot but even college ball and the pro ball players The other thing I'm really trying to do is educate the NFL Alumni Association about testosterone.

These guys, when they retire, unfortunately they can't get it while they're playing, but I've had pro ball players that could not wait, that have treated their wives, pro football players.

The day they got, they retired. They came in to get their testosterone because they had it tested, They knew it was low, But they cant get replacement because it's considered performance enhancing.

drug and it's a catch-22 because every time they hit their head, and let me tell you what else, within 20 minutes of a TBI, even a mild concussion, you have intestinal permeability, leaky gut, junctions open up.

So it causes issues with the gut too. I love that you brought that up and I appreciate that because we don't talk about that enough. Yeah, yeah, absolutely.

That is definitely not well known enough. I don't even know that I wrote about it in the book. Should probably write a chapter about because that is it's a big deal.

It's really big. What advice would you give to patients who feel dismissed or confused about their hormone symptoms and don t know where to start? Well, come see you or a provider that's been trained and understands.

I mean, you know, I have to say you got to give your clinicians a break. If you don't feel heard or understood, it's probably not that you have an uncaring doctor.

It's, probably you haven't an educated doctor and that not their fault either because we're not taught these things in our primary programs. You have You have to seek help.

So if you have a doctor that you love, that think could really help people, then you send them to our website and go, go get trained in this stuff. But I think finding a provider that has been trained and really does this in their practice like you, I that's a big, big point for your listeners.

If they're somewhere not local and you're too far to see them or whatever, when they are looking for somebody that does, ask them. how many hormone pellet patients do you see a month?

How many pellets procedures do a do month because if they're doing less than 25, you probably want somebody that's a little more experienced. Yeah, yeah, absolutely.

Well, looking ahead, where do you see the future of hormone optimization and integrative medicine going? Like, what excites you most? Well I'll tell you, and I'm going to say, please hear me, this is not a political statement, but I am very excited about where we are with the mindset around disease prevention.

in our current government climate. And we have an opportunity right now to really radically change some policies with food and things like that. That's one thing I'm actually a part of a Healthy America First Women's Initiative for Health for Women and Children.

I'll be in DC in two weeks actually to help start developing policy around this. the current people that are there really are interested in this and realize that the chronic disease, we are the wealthiest and we have some of the most technologically advanced healthcare in the country and one of these sickest nations in And so we're finally

recognizing that, hey, food plays a role and hey maybe we need to start looking at disease prevention and root cause.

And, so I'm really excited about the opportunity to educate lawmakers. That's really what I am excited because we have lawmakers in D. C. that are on both sides.

It shouldn't be a political timeline thing. that this is American, this we're all human, right? So I'm really excited about that. The scary part that I am learning is that it takes a long time to make those changes, but you know, you got to start somewhere and having an opportunity to kind of sit at the table with and educate some of these lawmakers.

I m very, very excited. That is great. That's really exciting. You know, this needs to be standard of care, you know especially for women. Testosterone therapy, especially Pella, it should be a standard care for woman because there is no FDA approved synthetic drug that the pharmaceutical industry has created to address testosterone deficiency in women, its an unknown phenomenon.

right, because the drug companies are who educates our medical schools. And that's another thing that our administration currently is really looking at is getting the bias out of medical school.

I mean, these are things that, again, doesn't matter your political affiliation. This is just the right thing to do. Yeah, and I get that question a lot of, you know, if this is so great, why isn't it part of standard medical care?

And I have to go back and say, well, ages ago, the Supreme Court made a decision that you cannot patent something that occurs naturally in nature, like hormones.

It's like you can't patent water. And so the drug companies have no incentive to have everyone on bioidentical hormones because they're not making a big profit off of this.

You know, the interesting thing about that to me is estradiol patches are bio-identical. My guys progesterone is bio identical. So it's just, there's no money in it.

That's the bottom line. I mean, it is cheap. It's cheap medicine.

The Future of Hormone Medicine and Prevention

And I'll tell you, I'm cynical, but I am being cynical. But it s truthful. We don't want cures for disease in this country. They're very profitable. Obesity is very profit.

Cardiovascular disease, diabetes, cancer. Very profitable! So why would we push a therapy or therapies that help decrease disease burden? Alzheimer's disease, oh my gosh.

I hate to be a cynic, but you can follow the money. It's easy to see. I'll give you an example. So this is a really interesting phenomenon that the number one cause of non-Hodgkin's lymphoma is glyphosphate, which was created by Monsanto Roundup.

We're the only country that has not outlawed glyphosate on our food. First of all, let's start there. Second of All, Monsanto was bought by Bayer Corporation.

Bayre Corporation also has a chemotherapeutic drug that treats non-Hodgkin's lymphoma. So they own the cause and they owned the treatment. That should not be happening.

That sounds like a huge conflict of interest. And that's just what we know about. There's so many stories like this that when you get to rubbing elbows with people that are in the know, you kind of go, this is sickening.

What has happened in our boundary? So I'll answer to your question, but I'm really passionate about it because it is, I mean, you think about our kids and, and you know, just so many of the diseases, type two diabetes was, used

to be called adult onset, now it's not because one in seven kids has type 2 diabetes, which is a totally diet driven thing.

Diet and toxin driven. Yeah. And baby formulas, I mean, we're seeing more and more with baby formula and how we start babies out, just getting them addicted to the chemicals and the sugars that are in baby form.

It's a real issue and people need to wake up to it because it's really real. Well, thank you so much for joining me today. I'm going to put your information about Avexapel on the show notes.

Patients who are living outside of Texas, and I only see Texas patients, but they can find somebody who is a provider in their area on your website. We appreciate you having me on.

Obviously, I am passionate about it. Thank you for giving me an opportunity to share. Absolutely. Well, thank you for joining us today on the Functional Edge podcast.

I hope you've enjoyed this insightful conversation with Dr. Terry Danai and come away with a deeper understanding of how hormone optimization can be a powerful tool for restoring health and vitality.

Hormone optimization is the core of any anti-aging program, wherever it is. You have to have your hormones optimized. To learn more about Dr. Terry Nye's work and Avexapel approach to hormone therapy, be sure to visit avexpel.com.

And if you're curious about whether hormone optimization might be right for you, I encourage you to start a conversation with your provider who understands the full picture of your health.

So until next time, i'm Dr Julia Ward. Stay informed, balanced, and keep leaning into the functional, to the edge of what's possible with Thank you for joining me on the Functional Edge.

I hope today's episode gave you fresh insights and practical tools to level up your life. If you found value in what you heard, don't forget to hit subscribe, share the podcast with someone who needs it, and leave a review.

It's the best way to support our mission of bringing powerful health solutions to more people. For more resources, updates, and behind-the-scenes content, visit drjuliaward.com.

Until next time, stay strong, Stay healthy, And keep living on the functional edge.