

## Episode 123 Transcript

Dr. Jaclyn Smeaton (00:06.968)

Welcome to the DUTCH podcast where we dive deep into the science of hormones, wellness and personalized healthcare. I'm Dr. Jaclyn Smeaton, Chief Medical Officer at DUTCH. Join us every Tuesday as we bring you expert insights, cutting edge research and practical tips to help you take control of your health from the inside out. Whether you're a healthcare professional or simply looking to optimize your own wellbeing, we've got you covered. The contents of this podcast are for educational and informational purposes only.

The information is not to be interpreted as or mistaken for medical advice. Consult your healthcare provider for medical advice, diagnosis or treatment. Hi, and welcome to this week's episode of the DUTCH podcast. Today, we're going to talk about a really important issue that comes up as you talk about menopausal hormone therapy, and that is breast cancer. Really today's guest is an expert clinician to the nurse practitioner and really at the forefront and the cutting edge, both of research and a lot of the modalities that are coming out in this space right now. And I loved talking with her about breast cancer and HRT. The reason why is that a lot of women were told that if they had a family history of breast cancer, they should never think about hormone therapy. They should be afraid of estrogen in particular. And the data now shows that that is really not the case. In fact, estrogen only, you'll hear as a takeaway in a recent really large study over 10,000 women showed that actually women who were on estrogen only had a reduction in breast cancer. So.

One, we're looking at breast cancer risk in menopause. And then we're gonna talk also about women who have had breast cancer, where the guidelines state you should not be using menopausal hormone therapy. But we wanna talk about all the other things that are out there for these women, because there are a lot of other options. And now Lexi Yoo is my guest today. She's a CEO and founder of Yoo Direct Health. She's a double board certified nurse practitioner, and she holds a functional medicine certification and a ton of advanced training in aesthetics and peptide therapy. She has so much experience guiding women through perimenopause and menopause and really specializes in a personalized hormone optimization approach guided to help women improve their quality of life and long-term health. She has her own podcast, the Better You podcast, Better You Project podcast, where she shares insights on health, hormones, longevity, and aesthetics. You are gonna get so much out of today's podcast, especially if you're a woman or you know someone who's had breast cancer.

Dr. Jaclyn Smeaton (02:29.408)

and you want to think about what you might do to feel great through perimenopause and menopause. You're going to love this episode. Let's dive in. Well, welcome, Lexi. It's great to have you back on the podcast.

Yeah, it's so good to be here.

I know your practice, before we dive into the topic, I know your practice is like really busy and very cutting edge. What are the things that are really interesting that you're working on right now or things that patients are really loving?

Yeah, so right now the landscape specifically with peptide therapy is like ever evolving ever changing, know, there's new administration going on and so like every day it's like something something is either getting removed or something's come back, right? So, you know, there's this big ndt might be going away type thing, right? So patients like what are we gonna do? And i'm like listen, let's just take it one step at a time There are other options and you know, here's what i'm gonna do So just dealing with a lot of the new changes

in many of the modalities that we use, specifically with peptides. And then the other thing I will say in that I also do aesthetics is I'm really leaning into some of the bio regenerative medicine. So we started doing where you utilize.

Lexi Yoo, NP (03:35.712)

Instead of PRP, we use PRF, but we actually heat it up with the albumin and it actually forms like your own personalized filler for faces. So we have a lot of women who want to look good aging, but they want to take more of a natural approach. And so I'm utilizing that with peptides and ozone therapy to really like accentuate the release of growth factors in like the safest way possible. So that's also really cool that I'm working on right now.

There's so much happening. It's really, I love, I love talking to you because I always learn about what's really kind of booming right now. You know, for the listeners who don't know

you well, you have such a unique background. So I always love to start with you sharing a little bit of your backstory because you're conventionally trained as a nurse practitioner, double board certified. And then you've really moved into this more comprehensive, functional anti-aging practice. Can you share a little bit about your journey and how you got there and why?

Yeah, absolutely. So I'm going into my 20th year as a nurse. I know it looks like

That's amazing. He started when you were five.

I was about a week old now. And I'm actually going into my 12th year as a nurse practitioner. So I've been doing this a while and I started out in pediatrics in like neonatal ICU. So you don't get any more conventional than acute care, more of a reactive type model. And as I progressed, I became a nurse practitioner. I've worked in a variety of different places. But really what I have found is when I ran a medical weight loss program for a bariatric office. And so I worked closely with

Lexi Yoo, NP (05:01.872)

the dietician and really understand what the different resective procedures did like a gastric sleeve or a bypass and removing pieces of the bowel and what that does for absorption and nutrients and.

as we know, everything starts in the gut, right? And so what I quickly learned is I could potentially help patients without surgery and without medication and it was like that light bulb movement. And so I left kind of that bariatric surgical practice and I started working with a DO. And so DOs, Doctor of Osteopath, are trained in a very different model. it was just a different way of thinking and took my first IFM course, the IFMCP, and I was hooked.

I was hooked and so that was in 2016, 2017 and I haven't looked back ever since and I started my own practice in early 2019 and that was when I got into peptides and what I learned is, especially with women.

once you help them and they feel seen and heard, they will follow you to the ends of the earth and whatever crazy new idea you have, like, sign me up. If you're into it, I'm into it. And it allowed me this great canvas of these patients who I had their trust and I was gonna do everything I could to help them in whatever way they wanted. If they wanted to do it more of a natural route, I've got all that. If they wanted to do cutting edge stuff like peptides and IVs, I've got that too. so.

Really, it just kind of evolved into this really great thing and as I grew, I had to hire more nurse practitioners and so I got really good at training. I got really good at training and education and I found that I love it. I absolutely love building up new practitioners to show them there's so many ways you can help patients and don't let the overwhelming of a DUTCH scare you from offering it. That's honestly one of the greatest things is DUTCH offers.

Lexi Yoo, NP (06:50.216)

know, resources and webinars and blogs and my favorite is the podcast. I love it it's like learning on the go and it's like easy. and so, so taking that passion of educating patients, the cutting edge and then being more innovative, I think is really where we've evolved into this practice.

It's amazing and you've been so successful and I'm so happy for you and for your patients. And for the clinicians that trained under you too. mean, think there's this great book called Meet You at the Top. It's really old, but it's about like the way that you become successful is by lifting others up. And you are someone that I look to in that category of like providers who are always lifting others, creating opportunity for others. And I really admire that. So keep up the great work. Well, we are here to really to talk about women and talk about the ways that one of the ways you care for women and really when we

think about like perimenopausal and menopausal women, it's a really unique group and I'm so glad there's more light being shined on this group of patients. This is a big part of your practice,

Yes, absolutely. I think it's the percentages. 88 % of our patient base are women. I really pare down the statistics. So my husband runs the business with me and he's a numbers guy. like he rattles stats off to me all the time. Our sweet spot is like 40 to like 55. That's a majority of our patients, which as you and I know, that's when like symptoms and things are really changing and being more proactive instead of reactive is the best way that they're going to

transition into that next phase of life.

Dr. Jaclyn Smeaton (08:22.988)

Yeah. What are the main concerns that women typically show up with when they're in that age group?

Yeah, you know, I think sometimes for women, it's very difficult for us to articulate what's wrong. And a lot of times, I just don't feel like myself. I don't feel right. So sometimes it's related to sleep. Like, I'm not sleeping how I used to. I'm just really stressful and I'm anxious and I don't want to go on an SSRI. Like, what else can we do?

brain fog, weight gain, that's a huge, huge one, especially now with the boom of GLP ones, people want to dig a little, when they come to us, they want to dig deeper besides just going on a GLP one. I would say those are the common ones. So sleep, fatigue, moodiness, brain fog, low libido. We do, we do a lot. do a lot of sexual health because I've mixed the peptides and the O shots and things like that. So libido is a common one, but libido can be tricky. Like that's a whole episode for itself in that I have women where I feel like they are hormonally optimized.

feel better in so many facets except libido. And so that one is like digging more into the neurotransmitters of the brain and looking more at how those imbalances kind of happen.

Yeah. Libido is so complex for women, even much more so than men. yeah. We're still learning about just the complexities because it's like really starts in the brain and it starts with connection. There's like so much more than just biology involved. There's really

definitely something to talk about on another episode. I want to talk a little bit about menopause and menopausal hormone therapy, which I know you've done a lot of in your practice. And really today I want to dive into one of the biggest concerns that women raise when it comes to getting off.

Dr. Jaclyn Smeaton (09:59.054)

on to metapausal hormone therapy, which is breast cancer risk. Now we know that hormonal changes in menopause influence breast cancer risk, and we know that it's a big concern of women. Knowing that hormone patterns can influence breast cancer risk, like how do you help women make sense of this connection in a way that's like really clear and really actionable?

Yeah, you know, a lot of times when I'm doing an intake, you we ask about family history and they say, well, my mom had breast cancer so I can't have hormones. And I'm like, hold on, let's roll it back. And I think a lot of times we say too, you know, genes loads the gun, but lifestyle and intervention can really make or break a situation. So I oftentimes will educate the patient on like, what are your concerns? And then I talk about their symptoms and then I start digging into the research. so unfortunately you and I both

No, there was a really poorly designed study that came about and many physicians took it at face value and just really scared a large population of women who were maybe on hormones or maybe in the transition. And so now it's trying to rewrite the history of.

well, what did that study actually mean? And so I honestly, I tack the topic head on. I oftentimes recommend the book Estrogen Matters because I do feel like that is a great book. That is a very educational option for patients. I kind of talk about, you know, let's talk about the benefits and the risks kind of thing. And so the big thing that I also talk about too is kind of I said that sweet spot of patients who come to us. One of the flaws of that study is we call it like the timing hypothesis, right?

is the best age to actually get hormonally optimized or initiate hormone therapy and it's within those 10 years of when menopause is typically initiated. So you know if the average age of menopause is 52, know women you know in their 40s up you know up to 60 like

that's prime and I'm not saying women beyond that can't have it I absolutely have women on hormones beyond that but if we're really looking at the data the the best way to lower your risk of heart disease osteoporosis

Lexi Yoo, NP (12:10.55)

dementia, Alzheimer's is going to be within that window. So I talk about that. And the second thing I would say is that the method and the modality absolutely matter. So when we really look at the research, we look at things like how are the metabolites happening when we're using things like a patch versus an oral estrogen pill or a progestin versus a bioidentical progesterone. It is different. you know, I think hormones just kind of sometimes get a bad rap. But when you really pair it

to the explanation of the timing and the modality matters and not only that, you. You are your own end sample of one and so what are the ways that I can really keep a finger on the pulse is I can look at blood work and I can look at hormone metabolite testing and I think when I explain all of that to them they feel much more confident in that decision making because we're making it together and I'm going to give them every piece of information I have so they can actually do an informed consent.

Yeah, absolutely. I mean, I think about a couple of things that you pointed out there. One is that family history of breast cancer is not a contraindication for HRT, an absolute contraindication. If you have a personal history, then you really need to be cautious. Family history is not.

Cardiovascular health is not. There's so many, like the HRT is opened up to so many more women as we reanalyze the research. It's really, glad that you bring those things up, because a lot of the concerns that were raised come from faulty interpretation of data, really, the WHOI. Now you mentioned the lab testing, conventional lab testing and metabolite testing. Can you talk a little bit more about what you do and what you look at?

Yeah, so in females, let's say they're coming in and they're more on the perimenopause. Maybe they're still menstruating, but it might be a little bit irregular. Or let's say they've had a partial hysterectomy. So their ovaries are still working, but we don't really know. Ideally,

it's great to check a serum value just as like some baseline information. And if I can check it around day 19, 20, 21 of their menstrual cycle so I can kind of look at what progesterone is doing. But as you and I know, being clinicians in a busy practice, that's not always perfect, right? And so I will

Lexi Yoo, NP (14:21.392)

oftentimes start there and I'll look at a total testosterone, an estradiol, a progesterone, an FSH, maybe an LH, maybe a free testosterone. If they're coming in with complaints of hair loss, that is a common one I get to. I might look at iron and ferritin and DHT. But the thing is, it's kind of like if we're not seeing the success or we're not getting symptom improvement or...

I'm worried that they are maybe at a higher risk of breast cancer. I then jump into hormone metabolite testing and I specifically explain why. So I always kind of give the analogy is, you put gas into a car and the car is running, right?

but you have no idea what like the check engine light is doing, what's under the hood, does your tire pressure, is that okay? And that's kind of what the DUTCH test does, is it gives us a blueprint of what hormonal pathways is your body in its current state currently favoring, and then what we can do together through lifestyle, nutrition, peptides, supplements, prescriptions to help alter that or.

change those pathways or I live in Indiana so we got a lot of roundabouts. Where I can help your body go down the more protective roundabout versus what it's doing right now. So I think those are big pieces. The other thing that we commonly see, I would say the first hormone to unfortunately go is that progesterone and so a lot of the women's are gonna have a little bit of issues in that luteal phase. So that's gonna be the week before their period which is a great time to get a DUTCH test because then we can kind of see, okay you actually are a little bit low.

explain some of your symptoms and then not only that, because that progesterone is low, there's this term thrown around called estrogen dominance, right? And I almost cringe a little bit when I hear that term because I'm like, because that can interpret as a lot of things.



And so what I tell women, it's not that your body is maybe over making estrogen. Now, this test will help us actually determine what it's doing, but it could be in relationship to progesterone. They're just not balancing each other out. And so I would say the math is not math thing when it comes to that progesterone and your estrogen is

Lexi Yoo, NP (16:21.624)

is a little bit higher, which is gonna put you at risk for things like heavy periods, breast tenderness, especially a week before your cycle, when you're on your cycle, uterine fibroids. And so that's when we really start getting into some of the why would I do a DUTCH test is because I wanna figure out what pathway that's going down and then I have all the options to help you alter that pathway.

Yeah. I love that you bring up that estrogen dominance term because it's not a, like a clinical diagnosis and you hear it thrown around a lot. And actually there's a lot of criticism of the functional medicine, like hormone world for utilizing that term. And I think no one had bad intentions to try to create a disease where there's no disease. was really a way to describe the patterns that you see that, you know, where there is this kind of relative underproduction of progesterone or alternately poor metabolism of estrogens, which then

kind of increases the binding at the receptors and all the downstream impacts of it. And those are very real, even if estrogen dominance is not a medical term. So thanks for calling that out. Now, can you give a couple of examples? I love that, like the check engine lights on, you don't really know what's going on in the car. What are some of the things that you've seen or like realizations you've had about patients cases that have come out of a DUTCH test that maybe you would not have picked up on in serum?

Yeah, well, and you know, I think too, a lot of times I'll use gut testing to kind of help give me some insight. so looking also to at the astrobalone, right? So when I see certain things like constipation and difficulty with weight loss and all these things, and they can have dysbiosis, which is, it could be overgrowth of certain bacteria, but looking specifically at a marker called beta-glucuronidase can really give me some insight to like, okay, their estrogen is not getting eliminated. It's literally being excreted.

getting bound up and then it's getting reabsorbed back into the system. So a lot of times I'll look there and then I'm like, and now we need to do a DUTCH test because I need to see what's going on. So I would say a couple common patterns would be, well, when you look at page one, the cortisol, I feel like everyone's cortisol is dysregulated in some way. I see a lot of that wired and tired female who I'm physically exhausted, but I lay in bed at night staring at the ceiling like, I gotta do this tomorrow. And I got it. Did I email that teacher?

Lexi Yoo, NP (18:39.76)

you know, did I pick up this from the dry cleaner? And so helping looking specifically at their total and their free cortisol is really helpful. And then we can kind of make some lifestyle decisions, you know, looking at like.

What time do you go to bed? Do you allow yourself a good seven to eight hours of sleep? Most women don't, by the way. So that's kind of like that page one. And then we do a lot of testosterone replacement in women in a lot of different modalities in my practice. Because if you look at the research, the benefits of testosterone, especially in breast cancer patients, and I think we'll probably get into it, is actually fascinating in how it can kind of compete at the receptor site with estrogen, which can lower the recurrence rate of breast cancer.

recurrence in breast cancer survivors. So I love looking at the third page, so I'm like thinking about how it looks, the third page when you look at androgens, DHEA, testosterone, the aromatization, so where testosterone converts into estrogen, and looking at those dials. So I would say that's another thing that I look at is where are the androgens going and are they gonna be someone who maybe tolerates a little bit of a higher testosterone dose?

If that five alpha reductase, it's a dial now. It used to be a turndown, now it's like a swiper. If that is on that far right where that five alpha is, I'm gonna say, listen, sis, I know that your libido still needs work, but I can't keep pushing the gas pedal on testosterone because you're gonna turn into a pizza face and your hair's gonna fall out and you're gonna not like me very much. So I wanna do all these other things, right? So that's a very typical pattern is it helps me gauge who will be those patients who can tolerate or not.

Then we look at progesterone. Progesterone is such a like, it's like the lady of tranquility type hormone in that she's trying real hard, but unfortunately our soil is depleted of magnesium, women are very low in vitamin D and, and you know, we just don't make a lot of progesterone as much as we start to get into those late thirties and early forties. So I can really assess if they're on therapy, is this going down the right pathway? Would there be a better option? And then the last kind of pattern is that estrogen dominant.

Lexi Yoo, NP (20:47.534)

pattern and so as their body is making estrogen, looking at is it going down the protective pathway which is our 2-OH, is it going down the quinone pathway which is our not protective pathway, so I think about my patients with family history of breast cancer, I tell them listen we got to do everything we can to keep this dial on the low end because we want to make sure that that 16 to 2-OH ratio is in our favor and then looking at the comp and looking at the 2 methoxy, you know, are you methylated appropriately?

So I would say really the estrogen dominance, look at a lot. I look at that those androgens just because again, we offer so many modalities of testosterone. I wanna make sure I'm doing right by the patient. And then all those other pieces are also extremely helpful in the overall clinical recommendation for the patient.

Yeah, the estrogen metabolites, and I want to talk more about testosterone too, because I'm really curious to know your thoughts around that in particular with breast cancer. But starting with estrogen metabolism, now there's controversy and discussion around whether estrogen metabolism even matters when it comes to breast cancer risk. There was actually a recent post, I was trying to pull it up from a conventional provider who does in the

I saw it, I saw it, and I was like, oh boy.

Is it Dr. Amy, her last name, Killian, maybe Killian, Killian? Yes. I to look it up. Anyway, I thought she did a super thorough job with evaluating and she created this table in Excel with all the studies she could find and her assessment of them and kind of rated whether they were plus or minus with supporting the theory that estrogen metabolism.

Dr. Jaclyn Smeaton (22:23.606)

or the ratios matter. a couple points on this that's so interesting, because our team did a similar assessment about a year ago as we prepped for a webinar on this topic, and one of our doctors did an extreme, really this similar process. And so I had her take a look at this research table and give her thoughts and feedback. And one thing that's really interesting is that this gets down to where lab science is so critically important, and something I've learned, because I'm clinically trained.

I did biochemistry background ahead of time, so definitely had some lab background, because I worked in a pharma development lab before going back to school. the studies that she looked at included immunoassays, ELISA, and LCMS. Our lab uses LCMS. And what we found when we looked at the studies is that when you look at immunoassays, which we know immunoassays are particularly poor at measuring low levels of hormone, mass spec is so much more accurate.

The mass spec studies really do show the, and pretty consistently, that the ratios matter when it comes to breast cancer. The ones that use immunosay are the ones that are kind of all over the place. Some show it does, some show it doesn't. And when you look at that with a lab science background, you put that hat on, part of the reason why is that the reliability of the testing is really poor with immunosay. anyway, really, I should have a great job with that assessment.

And I think when you call out the ones that use just a better methodology in the lab, the data is pretty telling. There's one recent study that conflicted, which we're kind of, we just got the whole paper so we can kind of dive into that. really interesting place to start with this story because we do care about estrogen metabolites and you know, there's, are internally, we call them like the good, the bad and the ugly, right? You're two pathway, four pathway and 16 hydroxy pathways.

Tell me a little bit about what you see clinically with those kind of, when those metabolism ratios are off.

Lexi Yoo, NP (24:21.358)

you

Yeah, so if I see someone who's maybe high in the 16 little dial there, I feel like they're the ones who are complaining that they have a lot of like breast tenderness, breast swelling, fibrocystic breasts. They tend to have more of those mood issues. When they're down the 4-0-H, similar, I tend to see that they have like heavy periods, uterine fibroids. Their mammogram screening comes back, they have fibrocystic breasts, dense breast tissue.

They might even have a history of a hysterectomy because their periods were so bad that know the uterus had to go kind of thing and so those are kind of the avatars of those dials and in my two OH's I tend to feel like they you know they're a little bit more in the you know I track my sleep with my aura ring and you know I try not to eat after a certain hour and they work out and I feel like they have a good like phytonutrient dense diet they eat a lot of

veggies and a lot of greens. feel this probably overcharacterizing. I feel like my two OHS tend to be a little bit more health conscious and they're doing a lot of the little lifestyle things and it might be as simple as you're just not methylated really well you know so it might be an easy like fix like that or you get to the four OHS and it's like my god you poop once a week like what the heck is going on here and so I would say those are like the little avatars of what I see clinically in those patients. I love that.

the personality styles or avatars? Well, I think it's interesting because with metabolites, know that metabolism patterns, they end up showing up clinically different ways is what we see a lot and what our providers and customers report to us, similar to you. But the other thing is that health behaviors influence metabolism patterns too. So when you say like the...

Dr. Jaclyn Smeaton (26:12.652)

the patients with a clear 20H prevalence and their ratios tend to be healthier, there probably is a real connection behind that. Because we know that when you have inflammation or, you know, glucose dysregulation, that that will kind of change the

metabolism of estrogen. Of course, it impacts the metabolism of estrogen. So it's a little bit of a chicken and an egg with that as well. We'll be right back with more.

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We're back with the DUTCH podcast. So I think the other thing that I think is really interesting is that a lot of people don't realize metabolites bind to receptors as well. Even with estrogen metabolites, we know this with testosterone and androgen metabolites, because you talked about DHT earlier. We talk a lot about DHT. That's a metabolite of testosterone, but we don't really talk about the impact of metabolites of other hormones. Right.

Progesterone metabolites are really important. And estrogen metabolites are really important. Progesterone we really take advantage of, with the pregnened diols and the ability of a lot of the downstream progesterone metabolites to bind in the brain, like allopregnanolone, and have really calming, relaxing, GABA enhancing effects. That's what you really are getting at when you talk about that. That progesterone being kind of that pristine, relaxed, chill vibe that we're all going after.

Dr. Jaclyn Smeaton (28:10.431)

So, do you communicate that with patients around the metabolites of hormones being important?

Yeah, so it's.

an important way to explain it in that let's say you have a patient come in and they're postmenopausal. They don't have any hormones on board, right? So for me, I would not jump into a DUTCH test just yet because everything's empty. I need to see once I start replacing it, what roundabout, what highway is that one favoring? Then I find the data's far more clinically useful after they've been on some hormones a little while. So I would say in my older patients,

usually give them about six months of hormones and I'm like, and we're doing a DUTCH test. In my perimenopausal, know, kind of transitioning patients, I explain to them, you know, when is the perfect time to replace hormones? And I tell them, when you're symptomatic, and not only that, when we're seeing the subtle changes. And what's hard with women is you get used to feeling like crap.

They do, or they're great at rationalizing why they feel like crap. And so I tell them, like, did you know that that's a symptom of low, you know, and then I'll say whatever the hormone is, progesterone or testosterone. And so I tell them, you know, your body is making hormones on its own at this point, but wouldn't it be nice if we could really understand...

Lexi Yoo, NP (29:30.2)

how we could influence it a little bit more precise and this is why we call it personalized medicine because the plan that works for you may not work for me. So I say instead of throwing spaghetti at the wall and hoping one of those noodles stick, why don't we actually have a more precise direct recipe of where is that hormone metabolite going and not only that, what are the lifestyle things we can do to impact it to really get the most bang for your buck and to get the most use of your time and interventions.

That makes a lot of sense. Now when we talk about breast cancer risk.

mean, the early research on hormone therapy and breast cancer left a lot of women with lasting concerns. I actually did a consult last night with a provider around patient care and HRT, and this patient had had a leg amputation in 2009, and the doctors at that point said,

you will never be able to do hormone therapy. And now she's 52 and really suffering and came in to see this doctor, but she's so afraid of hormone therapy. And I'm like, well, if she was told that in 2009, that was kind of the dogma of the time.

hers was around clot risk, but I think a lot of women similarly, if they had breast cancer around that time, they really were left with a similar concern. Can you talk a little bit about like where does this concern come from? What's real? What is outdated science and where should women be at when it comes to understanding the connection between hormone therapy and breast cancer risk?

So, you know, to your point, you know, they think about like a hypercoagulable state. So if I have a lady and they come in and they're like, I can't be on hormones because I got a blood clot with oral birth control pills. I'm like, that's a completely different conversation in that when you consume it, goes through first pass of the gut, then goes through the liver talking about metabolites. It's going to increase your clotting factors, your fibrin. The type of hormones I'm offering to you is either a transdermal patch or an estradiol pellet or a

Lexi Yoo, NP (31:25.68)

topical so the metabolites or the the way that your body is going to break it down is actually quite different versus if you were taking an oral estrogen in that and then not only that when we look at the the stat the studies from the whi They called it progesterone, but really it was a synthetic progestin and so I Think when we really peel back the onion a little further we realize you can't compare micronized progesterone

to progestins. They are two completely different metabolites in that progestins, you will see a higher risk of breast cancer and you will see a higher clotting risk. In fact, I always say don't blame estrogen for what progesterone did in that when they really looked at the study and recently the Medicare 10,000 Women study came out, they actually found that women on oral estrogen alone had a lower breast cancer risk.

This is huge. mean, this is worth repeating and like just positive thinking about. This is one of the biggest studies that's ever been done ever. It was a huge amount of women.



women Medicare, right? And so they looked at this study and what they found is that women who were on non-synthetic progestins had a lower risk of heart disease, lower risk of cardiovascular events, lower risk of osteoporosis, and a lower breast cancer risk. The highest risk happened with women on progestins. So progestins is what is in birth control. I'm just going to throw that out there. That's what's in birth control.

What I'm offering to patients is gonna be usually a transdermal or a different modality where those metabolites are gonna be favoring a different pathway. I think the other thing to consider too is I feel like testosterone is often the unsung hero and if you really look at the research, and this is what kills me when my patients say, my doctor says there's no research of testosterone in women and I'm like.

Lexi Yoo, NP (33:19.944)

There's this great thing called PubMed. But there is a phenomenal breast cancer oncologist out of Dayton, Ohio, and in January of this year, her 15-year study follow-up came up, and what she did is she studied breast cancer survival rates, and she gave women testosterone pellets. And so I know there's a lot of controversy on my head, a controversy of that, but the study is actually fascinating in that women...

who were getting testosterone pellets and she would put anastrozole, four milligrams of anastrozole in her pellets, had a, I want to say it was a 47 % reduction in recurrence rate of breast cancer. And her study's free on the web.

You'll have to send me that link because I'd to, well I'll put it in the show notes for everybody, but I'd love to have a link to that.

And so what's fascinating is that, why does that happen, right? And so when we look at like receptors, the AR receptor, so the androgen receptor is competing. So it's not blocking estrogen, but it's competing for the same receptor that ER, so estrogen receptor is trying to bind to. So I always say it's like the toddler who wants to stick, you know, the little key into

the outlet. Well, testosterone is the outlet cover and estrogen was the key. And so it's like, we've already bound that up.

And so that's why we're seeing that. And the other thing that we also see with it too is that it also, testosterone can reduce the expression of estrogen, the estrogen receptors. And so we're seeing just a lot of interesting research and that was published, that was a 15 year follow-up to her Dayton study. And so that was published in January of 2025. fascinating research. And I always tell patients, listen, I wouldn't do anything to a patient that I wouldn't do to myself or my mom. And so,

Lexi Yoo, NP (35:02.838)

My mom is a breast cancer survivor. She's seven years breast cancer survivor and she's on testosterone and her testosterone pellet has an AstraZeneca in it. And she says, I've not felt this good and she couldn't remember the last time when. And not only that, she has seen a positive impact on her DEXA scan.

wow. Well, testosterone is great. It's definitely an anabolic, you know, bone building. It is. is. Yeah. Yeah. That's great. I mean, there's so many concerns, and rightfully so, I think for breast cancer survivors, you go through such a traumatic medical experience. You want to make sure you don't have to go through that again. And it's really tough because I think helping women stay grounded in scientific evidence is a critical role that clinicians play. And then you also see

I mean, we face this too as practicing docs. How do you even keep up with all of the literature out there? Like you hear that doc that gave bad advice. I mean, we hear that we see that often. And it doesn't come from mal intent. It comes from the challenge with like getting enough and getting the right continuing education or like having the time to read PubMed studies. But I think that really is what separates out the clinicians is when you're seeing science change and you have doctors who are.

giving advice based on old science, it's time to find a new doctor really because you want to make sure you're getting that newest information.

Yeah, yeah, research is there. You just gotta dig into it. I think the other piece of research that has been really interesting to see for breast cancer survivors is the use of vaginal estriol and vaginal DHEA for improving symptoms of not only GSM, but quality of life, right? So I had this patient, like I said, I do a lot of sexual health, and she's a breast cancer survivor, and she was almost made to feel by the oncologist, you're just lucky to be alive.

Lexi Yoo, NP (36:50.896)

of like, you know, like almost like give up on sex, like just be happy you're here. And I was like, unfortunately I don't feel that way. And so there's a lot of things. So for this patient, I did an O shot. I gave her vaginal estriol and DHEA. I gave her a testosterone with an astrozole pellet and.

I will just tell you her husband is now a patient so he can keep up with her. So it's great. It was really, really good. But the science is there as far as using the topicals locally without any risk of systemic absorption.

Yeah, I want to let's talk about this in a really clear linear way because I want our listeners who are patients and maybe breast cancer survivors to walk away with what the evidence says right now. Okay, so first of all, if you are a patient who has a family history of breast cancer, but you've never had breast cancer yourself, HRT yes or no? Well, assuming there's no other risk factors.

So I'd like to know, you know, what was the prognosis, you know, what type of treatment did you have to do, kind of thing.

Sorry, this is family history, so no personal history.

Lexi Yoo, NP (37:58.478)

No, no, still proceed on with hormone replacement therapy,

Yeah, guidelines or organizational guidelines. Metaposy society guidelines says you don't, you're not excluded from Metaposy therapy with family history. If you have a personal history, there's greater risk, right? So, but I'm really glad you talked about vaginal application of hormones. There were, this was actually a recent topic at FDA hearings over the summer. We saw docs like Rachel Rubin, Heather Hirsch, and a lot of others who went and testified to the FDA because Estradiol products have FDA warnings. They have black box warnings.

but those really aren't appropriate for vaginal products that are intended to be local. You mentioned that in this clinical case, but talk a little bit more about that. Why are they used? And the fact that they are safe for breast cancer survivors, there's really no one that those topical local products couldn't be used for.

So topical Estria, and what's so great, just as I said, I do aesthetics, like I've actually now compounded it into a facial cream with a peptide because it helps improve elasticity. It helps improve collagen. It helps improve the kind of the nourishment of the tissue so it's not so crepey. Pairing that with a little bit of DHEA, that can also be very helpful because it will help stimulate some of the androgen receptors down in the vaginal area. And that can also improve

libido, can enhance just the sexual experience and then there's also some studies to show that it can improve urethral sphincter tone. So it can help with urinary incontinence, can help with, know, women will say like, I feel like I'm getting a UTI every time I have sex. It can help lower the incidence of that as well. just, it...

Lexi Yoo, NP (39:40.536)

helps with kind of nourishing the vaginal tissue. It can improve elasticity, can improve the collagen down there, and it can improve the sensation as well.

That's cool. I mean, think the bottom line is that those low dose vaginal products, even if you're a breast cancer survivor, those are not out of the realm of safety for most women.

Yeah, they can still be utilized, which is great. You talked about a lot of other considerations when it came to like hormones and breast cancer risk that I want to really dive into. Cause I don't think we really talked about them in depth on the podcast. You alluded to first pass metabolism. You didn't use that term, but when you talked about oral hormones,

Right?

Dr. Jaclyn Smeaton (40:20.132)

versus topical hormones. Can you talk a little bit about what happens when you take a hormone orally? What happens in the liver? You'd mentioned increased production of fibrin and clotting factors, sex hormone binding, globulins, another one that goes up. Can you talk a little bit about that concept?

Yeah, so when you take a synthetic.

oral and I say synthetic only because I don't want perimetry to get lumped into what I'm about to say because we do have a lot of women on oral perimetry which is not a synthetic. When you're putting it's just the molecule is not exactly the same that we make and so your body has to do a little bit of a harder job to not only break it down so you take it swallow it goes through first pass of the gut then goes into the liver and your poor little liver is trying to break it down metabolize it

out into these useful pieces. Well, unfortunately, when that happens, your body has a trigger of inflammation, which then can trigger this whole cascade of adverse effects. So you'll see an increased risk of clotting risk with a synthetic oral hormone. You'll see an increased risk of cholesterol or triglycerides, LDL. You can even see an increased risk of glucose metabolism. And so it is

Part of the reason is because your liver is trying to break it down and because it can't essentially properly do that, it's going to have these negative metabolites, specifically on clotting risk, lipid metabolism in particular, glucose metabolism, insulin sensitivity. So it's specifically when it breaks down that it causes all these downstream effects.

Dr. Jaclyn Smeaton (42:04.974)

I'm glad you mentioned that. It's one thing that was really interesting to me as, because my practice...

clinically for 20 years was more cycling females. I did fertility, menstrual complaints, et cetera. So when I started working with DUTCH, it had been a while that I'd really focused on peri- post-menopausal, well, peri-menopausal a lot, but especially post-menopausal women and really relearning all this data. When I went to medical school, I graduated in 07, so that was really at the height of WHO information. So what I learned was based upon faulty interpretation. But I really walked away and I think

a lot of naturopathic doctors walked away with a sense that oral estrogens like the prometrium were really not a great choice and you should use transdermal only. And I'm really glad you bring up prometrium because I think that's another misconception even in the functional medicine space today. Prometrium is very safe. Transdermal is even safer. But we debated as a team as we were teaching on HRT, how are we gonna word this in a way that's really honest?

statistically. And, you know, I think it's great to use transdermal hormones whenever possible, but some women don't like it. They don't want to use a cream. The patches are itchy, whatever. Oral is still a really safe choice. We're looking at, you know, they people here, it's two to five times higher risk of clot versus a non user, but that's a relative risk. And when you look at the absolute risk, it's only like five to 15 clots for every 10,000 women per year, year of use. And it's really

That's very safe. That's considered a very rare complication. So anyway, I want to bring that up just to kind of comment on that when you talk about the oral. And so I'm glad that you're using oral, because it's better for some women. It's just so much easier to take for some people as well. So thank you for calling that out. When we think about, so we talked about kind of that first pass metabolism piece, and that's obviously one element of it. And then we're using the transdermal as another way. Now you've also talked about synthetic and natural. You've commented on that.

Dr. Jaclyn Smeaton (44:07.66)

a couple different times. When it comes to breast cancer risk, any differences on the estrogen use?

Yes, so I...

In the research, it shows that a transdermal estrogen is gonna be safer than the oral estrogen. But in that 10,000 Medicare women study, they actually showed that women on estrogen, oral estrogen alone, actually had a lower risk of breast cancer. But I always go back to two, and if you're a practitioner and you're listening to this, is God forbid if I ever had to defend something in front of the board of nursing for me, or the naturopathic board,

Is that something I am prepared to defend on that? So the studies are coming out, right? We have that 10,000 women study, but I don't know if I'd pull the trigger for me and my patients quite yet. I would absolutely consider a transdermal. I don't know if I would do an oral estrogen on them yet.

Yeah.

Dr. Jaclyn Smeaton (45:05.238)

And obviously, hormones have so much, there's so much change in the research right now because there's really, they're not used for primary prevention, but I wouldn't be surprised if in our lifetimes, the recommendations do move towards primary prevention, particularly for cardiovascular disease and maybe even dementia eventually. If I had my crystal ball, given where the research is headed, I think that we might see that in our lifetime, which is pretty amazing to think about. Are there any other considerations for women who have a personal history of breast cancer when they're coming in to see you? mean, what advice would

you give to those women as they're going through perimenopause and menopause.

Right. So I again, I really lean into the research that Dr. Glazier has done and a lot on testosterone in that testosterone replacement can actually improve 80 % of menopausal symptoms. And so, so I really try to educate patients on, listen, I hear what you're saying. Like, I think this would be a great option because many of these symptoms might actually be improved with just doing testosterone. I think,

Pairing that with the topical estriol vaginally can be very helpful in that, know, estrogen is such a lubricating hormone in many ways, right? Our joints, our shoulders, our bladder, our bowels, our skin. And so, you know, when we get women on estrogen deprivation therapy or if they're on like an estrogen blocker, God bless them. Like, you know, we want to help them so badly. And so in some cases actually, I've been successful in...

collaborating with their oncologist and I say, listen, I know that you have them on anastrozole, would you be okay if I put it in their pellet and have them stop taking it orally? And there's one oncologist here locally, I've sent her all Rebecca Glazer's research, gave her my cell phone number, I'm like happy to have a conversation and she's actually approved it and what's been so great to see is that that patient, that patient's actually a nurse practitioner, so she was able to advocate for herself a little bit more, is that she is not having the anastrozole oral side effects.

Lexi Yoo, NP (47:07.286)

with the pellet, the testosterone with the Nastrazol pellet as she was having by taking it by mouth. So I think there's something to be said on how a Nastrazol even has first pass of the gun into the liver in that her brain fog was awful, and she's still getting a Nastrazol, but it's just giving it in her pellet. So the metabolism, it's going through the renal system, not through the liver. So I thought that was kind of interesting.

That is really interesting. Now you brought up testosterone a few times in this. When women are coming into your practice with menopausal complaints, because said a lot of them can be handled by testosterone, how do you choose which hormone you should be like leading with?



Yeah, so I feel like progesterone is kind of a given, like perimetrium is kind of a given. I feel like most of my women, I talk about it. And I always say, listen, we're not married to any of these therapies. So if we don't love it, we can try something else, right? That's the flexibility. You're not locked in. So usually I will go over their symptoms and, if they're telling me like, I'm anxious, I can't sleep, which testosterone can help that.

But if it's like that week before my period, I usually am leaning in towards that progesterone. If they're telling me, I just have no motivation, I'm just depressed, my brain fog is terrible, I walk into a room and I forget why I went in there, I'm not recovering in the gym, I tell them, think testosterone might actually be a really great option for you. So a lot of times, I feel like progesterone and testosterone are like in my book are like neck and neck. Like I don't feel like I have a favorite one. I feel like they're very much like.

in tandem with each other. But let's say if you had a patient who was maybe ER, PR positive, they can't have progesterone, you know, with their PR, progesterone receptor positive breast cancer. I tell them, like, listen, let's start with testosterone and see what symptoms are left. And one thing that we started offering in our practice about a year ago is called neuro therapy. So neuro therapy, I'm not sure, are you familiar with it in your naturopathic? Yeah. Okay. So that has been.

Lexi Yoo, NP (49:07.672)

That has been actually really great in some of the, I feel like the mood stuff that progesterone can kind of help with. I feel like testosterone and those women who can't have it, testosterone with a little bit of neuro therapy has been like life changing for them, life changing. And so I think again, a practice like mine, we have the opportunity to offer so many different modalities that I think is super duper helpful when it comes to, okay, looking at your risk, we can't go that route, but I can also try these other things.

Yeah, that makes a lot of sense. Describe for our listeners a little bit more about neural therapy in case that's new for them.

Absolutely. So, neuro-therapy, I think it can mean a lot of different things depending on how you were trained. But neuro-therapy in our practice can look like an IV of utilizing procaine

with bicarb in a bag of ceiling and you run it through an IV. And what it does is it talks to essentially the autonomic nervous system. So, the autonomic nervous system is what houses your sympathetic, which is your fight or flight, run from a bear, and your parasympathetic, which is rest, digest, recover, and heal. And so, a lot of times women are

in this sympathetic dominant state, right? They're like living on adrenaline, they're burning and turning because they're trying to get through their everyday stuff. Well, what happens is, is you're leaning in so much on that sympathetic side, you have a hard time resetting into that parasympathetic system. And so things that I also recommend, box breathing, know, grounding, improving your vagal tone, tracking your sleep, meditation, binaural beats, brain tap.

But what this is doing is it's kind of taking you out of that sympathetic space because what, it breaks into these two little metabolites. The metabolites can also act on the endocannabinoid system of the brain, which is helping you kind of stay in this little bit of a calm state. So everyone's different, so we could do it in IV or we'll do like a localized infiltration. We don't inject right into the certain stellates of the body, but we'll do an infiltration of protein at the neck.

Lexi Yoo, NP (51:07.422)

So the stellate area and women will feel very calm during it. They feel very relaxed. Their mood just, you know, I know I have crap to do, but I'm not mad about it. We'll do one in the abdomen and that can be very helpful for women who struggle with constipation. And then in the pelvic region, we have two little stellates in there, or two little ganglions in there called the inferior hepatic gastric. And those two can be really helpful for women who struggle with like,

urinary incontinence, libido issues, interstitial cystitis, pelvic pain, menstrual cramps is a big one I use that one for. So it's kind of resetting those little charges in there. So we go from a positive charge to a negative charge and that can help reset the autonomic nervous system in the pelvic region.

So for clinicians, this is like Lexi, you're like top of your game with learning all these new things. So if you haven't heard of this before, that's okay. I know you do a ton of continuing education and a lot of research and development really at the cutting edge there. But a lot of really interesting things coming out that are.

available for patients. And most major cities can find clinicians like you, which is awesome. So as we think about women who have a history of breast cancer, like bottom line, what do you want them to take away from this conversation?

I think kind of the old dogma of medicine got it wrong. It's time to rewrite a new story. And there are so many great options and there's so many ways that we can be proactive instead of reactive to make sure that the recommendations we're making are clinically sound and we can help monitor to prevent further downstream effects. So utilizing things like the DUTCH test is a great way to ensure that what we're doing

Lexi Yoo, NP (52:54.804)

is of the utmost best possible outcome for you.

Awesome. And I think we've talked about so many other things when it comes to menopausal hormone therapy applicable. We're not talking about this for women with a personal history of breast cancer, but also just for women generally. Again, you wanna be cautious. It's not an absolute contraindication, but certainly proceed with caution with hormones if you've had breast cancer. We wanna make sure you're really working with your oncologist, working with your prescribing clinician, because this is a riskier area. But for other women, know from what you've talked about,

here, making sure that we're looking at bioidentical hormones as much as possible. We've talked about oral...

micronized progesterone or prometrium, which is the routine route that we would be administering that. We can use topical transdermal hormones when it comes to estradiol, which again does not increase the risk of breast cancer. You'd mentioned it lowers it. Even

oral estrogens can be okay. They're still very safe. And also then you talked about testosterone as an option, maybe even for women with a history of breast cancer based upon the data and research that you put together. I we've covered a lot today.

lot.

Dr. Jaclyn Smeaton (54:05.064)

thank you so much for joining me. It's always so fun to chat with you, like your charisma, your intelligence, your care for women definitely stands out. If people want to learn more about you from a practice standpoint, and you also do a lot of mentorship of clinicians, can you share a little bit about how they can reach you? And we'll make sure we put that in the show notes too.

Absolutely. So I post a lot of education, research, case studies on Instagram. So my Instagram handle is at Lexi U spelled Y O O N P. My training academy is called the Y D H training academy. So the website is Y D H academy.com that I also do some Instagram education there. We do offer a monthly mentorship where we do a mentor call and we do case studies and, and, just different business development type things, which I know you would appreciate that. and then I,

I also have a podcast called The Better You Project, you spelled Y-O just like my last name, where we cover things from women's health to men's health to peptides to neural to aesthetics, to all the fun stuff that I do. So lots of different ways to connect with me. I speak at a lot of different conferences from the IFM on peptides to aesthetics. So yeah, busy.

Awesome. We'll put those links in there for patients and for providers so they can get in touch with you. Thank you again for your support of DUTCH. You train on this, you teach on this, you're such a clear communicator. It's always so fun to talk with you too. Thank you so much for joining me.

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