Episode 107 Transcript

Jaclyn Smeaton (00:01 - 01:34)
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. Well, welcome to this week's episode of the DUTCH podcast. Today's a little bit of a special episode because I get to talk about a project that's been in the works for probably a year. And one of the things I am most excited about that we've done for education at DUTCH. Now today's guest, is someone that's been on the podcast before. She's one of the clinical educators at DUTCH and it's Dr. Kelly Ruef. Kelly is a naturopathic doctor. She's been with DUTCH for years and what you might not know is that she does do consultations. You probably, many of you talked with her on the phone and gotten one-on-one help with the report, but along with Kelly and Dr. Hilary Miller, they comprise the, really the powerhouses behind the majority of our education. And Kelly was instrumental in building up the course that we're going to be talking about today, which is perimenopause management. So welcome, Kelly. I'm so excited that you're here.

Kelly Ruef (01:34 - 01:37)
Me too. Thanks for having me as always.

Jaclyn Smeaton (01:37 - 01:52)
Now, the first thing I want to talk about is like, why did we choose to focus on perimenopause? Let's start with your point of view. Like, what do you remember when our team was talking about what we should be building courses on and what practitioners really need right now?

Kelly Ruef (01:52 - 02:17)
Yeah, I think when we were thinking about what courses we should develop, we started thinking about the material we already had developed in the past and realized that we get so many questions from providers every day about their perimenopausal patients, but we really didn't have much education on it. So we really wanted to develop an entire course to devote to these perimenopausal population.

Jaclyn Smeaton (02:17 - 03:01)
Yeah, a couple other points that was so interesting was we did some customer surveys right when I started actually to try to find out why providers were ordering the DUTCH test for their patients. And perimenopause was also the number one reason that DUTCH tests were ordered or the number one condition. Even more than menopause, even more than PMS, migraines, know, menstrual irregularity, all the things. It rose as the number one reason, which is like really identifying a need.

And then let's talk a little bit about like what's out there today for perimenopause education. Cause that's another thing that when we started to look at competitors, we really didn't find much out there to help practitioners learn about this 10 year phase of life. It's like a huge phase of life for women.

Kelly Ruef (03:01 - 03:22))
Yeah, exactly. I mean, you're seeing it more and more in the media, the media just picking up on how there's not a lot of education on menopause or even perimenopause. So it's kind of almost a disservice to women during that stage because it's a life changing, life altering stage that if we're lucky, we will all go through.

Jaclyn Smeaton (03:22 - 03:54)
Yeah, absolutely. And what we saw was that there's a lot of practitioners who have courses available for patients to go through or for consumers to go through, but there's really nothing out there that we could find for practitioners to learn. And this is an area where I think hormonally, it's so challenging to understand what's happening with your patient and where functional lab testing and like the full cycle map, which is what we really teach and talk about in the course really give insights that can be hard to uncover any other way.

Kelly Ruef (03:54 - 03:57)
Yes, would agree.

Jaclyn Smeaton (03:57 - 04:10)
So let's share a little bit of the highlights of what is happening during perimenopause within a woman's body and why it's so dang hard to help women feel great during this time.

Kelly Ruef (04:10 - 07:04)
Yes, I love that question. so there's, as we know, there's a lot going on in a woman's body, especially, well, her ovaries and her brain during that perimenopausal transition. And I think to really, truly understand perimenopause, we have to talk about the HPO access in a pre-menopausal younger cycling female. So the HPO access, we know it's the hypothalamic-pituitary-ovarian access. And our brain and our ovaries are constantly talking to each other. And usually, you know, in a younger, healthy cycling female, the brain

and the ovaries, their communication is excellent. So the cycle, you know, it starts out with the brain, the pituitary really releasing FSH and LH and FSH just like its name implies it's a follicle stimulating hormone and it stimulates the follicles to grow.

So in the very beginning of the menstrual cycle, remember day one of the menstrual cycle is when we get our period, we have FSH increasing and we see those follicles starting to grow. ~ As the follicles develop, usually a dominant follicle is chosen and that dominant follicle as it gets bigger and bigger, it makes more and more estrogen. And as the estrogen increases, as that follicle makes more and more estrogen, estrogen will surge at one point and cause the pituitary to release LH, luteinizing hormone. LH is what causes ovulation. So that egg ovulates from the follicle and then the follicle turns into the corpus luteum, which is that tissue that starts to produce progesterone. We're hoping it's a robust amount of progesterone to oppose all those proliferative effects of estrogen. And another thing to...to point out is our follicles also make these glycoproteins called inhibin A and inhibin B. And their main function is to suppress FSH. So that, you know, there's not too many follicles developing at once. We just want one dominant follicle to make sure there's not just an extraordinary amount of estrogen being made. in perimenopause, and perimenopause can start two to eight years before we hit menopause. In perimenopause, that communication between the brain and the ovaries really starts to break down. And one thing to point out is as we get older, as our ovaries get older, our follicle size and number decline. And so we really do have less inhibin A and inhibin B inhibiting FSH. And you'll see that in the labs, right? In perimenopause, FSH starts to increase.

Jaclyn Smeaton (07:04 - 07:06)
really quite high sometimes.

Kelly Ruef (07:06 - 08:32))
Yeah, and it can be very variable. Like in the early perimenopausal transition, you might have a normal FSH one cycle, and then it might be high the next cycle. But FSH, remember it tells the follicles to grow and make estrogen. Sometimes, especially in early perimenopause, those follicles will over-respond, and they'll make a ton of estrogen. And we always say that when we're in perimenopause, we hop on that estrogen roller coaster.

We've seen this on DUTCH cycle mappings where women, their estrogen will surge high, like higher than before when they were ovulating and it'll search for three weeks straight. And maybe they won't even ovulate after maybe they won't even have any progesterone to oppose all that estrogen. So really the physiology behind perimenopause is quite fascinating because we do have that dysregulation with all the signaling between the brain and the ovaries, which in early perimenopause, we tend to see higher estrogen more

frequently. And then in the later stage of perimenopause, as we get closer to menopause, we just see more of that decline of estrogen and progesterone into the postmenopausal levels. So you really do see different physiology depending on where you are relative to menopause. And you'll have a lot of different symptomatology too, depending on what stage you're in.

Jaclyn Smeaton (08:32 - 09:43)
Yeah, and it's interesting because sometimes when...patients come in with a symptom. You don't know if like the root cause of that is surging estradiol or whether it's just this load like decline in progesterone over time. And then the fact that it can be a roller coaster makes it so difficult to assess and to help women. Actually Lexi, you want to, she's a nurse practitioner to the client of ours. And, I've been on her podcast and I think she's been on our podcast. She had this great analogy where she said in perimenopause, the ovaries are like, ketchup bottle, where it's at its end of life. you, I'm gonna, can't do this without hand motions, I hope you're on YouTube, but you like shake the ketchup bottle and you shake it and you squeeze it and then nothing comes out. And then you shake it and you squeeze it and then nothing comes out. And then you shake it and like on that month if you get a fall kill you squeeze it and then there's just this blast of ketchup, like way too much all over your organic grass-fed beef hot dog. And it's way too much and it's disgusting. And that's such a...memorable way to think about perimenopause because you just never know what you're going to get per cycle and it can be, it's like either too little or too much and rarely is it just right.

Kelly Ruef (09:43 - 09:55)
Right. Oh, I love that. Yeah, I always think of like the ovaries, they're retiring. And so the brain starts to scream at them like, hey, ovaries, I'm not retiring. Why are you retiring? You got to you got to still keep working.

Jaclyn Smeaton (09:55 - 10:34)
So in this course, we really tried to take a soup to nuts approach, knowing that this is a confusing time for practitioners to understand. One thing that I love, and I think you can talk about this and what it's like to have a job where you get paid to do this, is we get to read all the primary research. It's like that's our job is to read it, understand it, and then find a way to digest it and share. And we spent a lot of time going through the studies around perimenopause the guidelines from not just the menopause society in the US, but international as well, around what to do to help women in perimenopause.

Kelly Ruef (10:34 - 10:52)
Yeah, we sure did, especially Dr. Hillary Miller. Shout out to Dr. Miller. She put so much time

and effort into looking into the association guidelines and all the research out there. She did a really nice job presenting that research too in the perimenopausal DUTCH course.

Jaclyn Smeaton (10:52 - 11:45)
And one thing that I think is really important to point out is that perimenopause is kind of a clinical gray area. It's not in a nice, pretty little box like a lot of other times of life for women. And one thing that I think is really important to take away is that while there is not really clear guidelines, because the gray area on how to help women during perimenopause, even conventional associations say that you don't need to wait until 12 months after your last menstrual period, which is menopause, to institute or initiate hormone therapy. And that's a hurdle we want to help practitioners overcome. Can you speak a little bit more to that of like, what's coming in for questions from practitioners when they call our DUTCH doctor team? Like, what are they hoping to learn about their patients in perimenopause and what kind of help are they looking for?

Kelly Ruef (11:45 - 12:45)
Right. Well, first of all, thank goodness we can start hormone therapy before we hit menopause. Cause a lot of women are suffering for months, years during perimenopause. ~ okay. So when we get calls in during our consultations, a lot of people are wondering about, course, more diet lifestyle supplemental approaches for perimenopausal women, but hormone therapy also.

And we talk about progesterone therapy a lot, but I always get the question, what about estradiol therapy? She's not officially postmenopausal. Can I give estradiol therapy? I'm worried about giving estradiol therapy. I don't know if she's gonna tolerate estradiol therapy. What if she has another period? Is it going to be at like outrageously heavy bleeding and you know, so there's a lot of concern. There's a lot of interest though, in using hormone therapy before menopause.

Jaclyn Smeaton (12:45 - 13:25)
Yeah. Well, let's talk about that because one thing I think would be helpful to name for listeners, because I'm sure some of you out there are practitioners who are like chomping at the bit to get access to this course. And I don't blame you. You're our key audience. And I bet there's also a lot of women out here who are in perimenopause and saw that we're going to be talking about it today. What are some of the most common symptoms that women report kind of early in the perimenopausal transition, later in the perimenopausal transition, that would lead them to say, I should talk to an educated functional medicine or naturopathic doctor to get some help here.

Kelly Ruef (13:25 - 14:18)
So every woman's different. And what I'm going to talk about is just kind of what we typically see. in early perimenopause, this is when, you compare cycle to cycle, you might like length, cycle length, you might see a difference of seven or more days. So you might have a 21-day cycle, and then a 28-day cycle, and then a 25-day cycle, and then a 45-day cycle. So these women are tending to still bleed pretty frequently, pretty regularly, and they tend to have higher estrogen and lower progesterone. So it can be more of an estrogen dominant type state. And so these women, they tend to have more heavy bleeding, more breast tenderness. When it comes to mood issues, more mood swings.

Jaclyn Smeaton (14:18 - 14:24)
And PMS, right? That pre-menstrual period can be like, people are like, I've never had PMS before. And I really know what that's like.

Kelly Ruef (14:24 - 14:51)
They might be. Right, yeah, maybe they never had PMS, but now they're anxious, they're tearful. So you do see a lot more like anxious tearfulness. know, later as you get closer to menopause, women tend to have more low mood and depression. But in early premenopause, women can have those vasomotor symptoms. They can have hot flashes, but sometimes they have cold flashes to begin with. They can have brain.

Jaclyn Smeaton (14:51 - 15:17)
Just one more thing about that is that sometimes it's at certain times of the cycle too. And I think that's great to explain is like just after ovulation, because you get this surge or at ovulation, you get this surge in estradiol that triggers ovulation, it triggers ELH surge. And then when it comes down, that drop triggers hot flashes or premenstrally you might get hot flashes. So there are some commonalities where you're getting this like sudden drop in estrogen that your body's more sensitive to that triggers that. Sorry, keep going.

Kelly Ruef (15:17 - 16:28)
Yep, right around your period. And sometimes you wake up and you're sweaty and your sheets are wet and you have to go take a shower and then you to lay a towel down. It's big inconvenience, right? ~ and then it really affects sleep. So that's another symptom that women start to have is insomnia. Maybe they can't fall asleep or what we tend to see is they wake up during the night and it's harder to fall back asleep or they wake up early in the morning and they can't fall back asleep. So sleep is a big one and that tends to worse for a lot of women as they get closer to menopause as their estrogen and their progesterone really drops off. ~ You know, also vaginal dryness, musculoskeletal pain and stiffness. We tend to see that more towards the menopausal transition when our estrogen is declining. So, or around menopause, but brain fog even.

Maybe we can't recall a word or we don't know where we put our keys or you're like me and I think the other day I had my husband call my phone three times, three different times because I had lost, I did not know where I put my phone three different times in the matter of two hours.

Jaclyn Smeaton (16:28 - 16:35)
So it's not just perimetabosi. You're like double-dutying the tongue with your brain right now.

Kelly Ruef (16:35 - 17:34)
Yeah, and if you think about it too, like perimenopause, we're in our 40s, sometimes late 30s, ~ 50s. It's a really challenging time in a lot of women's lives. So it could be their fluctuating hormones, but it could also be that they have aging parents or that they have kids to take care of or that they're like in their prime with their career, they're building their career.

I think there's some statistics in a lot of countries around that age of perimenopause, menopause, not to be a downer, but suicide rate goes up because it can be very challenging. It can be very overwhelming. There's a lot of factors besides hormones that are affecting our symptoms. if we can support women with their adrenals, with their sex hormones, maybe adding in some diet and lifestyle options or hormone therapy, if we could just help them through that challenging time, that's going to be a big win.

Jaclyn Smeaton (17:34 - 18:06)
Definitely. ~ And the course, like building it out was kind of fun because I won't say we're all in perimenopause, but we're all at least in the perimenopausal wheelhouse decades of life. And so we had some good laughs about some of the things we found. And I think also some really big insights that even as experienced hormone docs we took away as we built the course. Do you want to share maybe the biggest surprise that you learned or found out about or took away through the course development process.

Kelly Ruef (18:06 -19:25)
Yeah, think my biggest, maybe two, two biggest wows was number one, and number one can pertain to any woman who's cycling or perimenopause, but estrogen is needed to increase progesterone receptors. And if we don't have enough estrogen in the first half of our cycle, we might not have enough progesterone receptors around to really feel the effects of progesterone. And we know that progesterone helps with mood, with sleep. It can help decrease issues with endometriosis, fibroids, bone mineral density. So estrogen and progesterone are really important. And sometimes in perimenopause, providers don't wanna give estrogen. They just wanna give progesterone until the woman is officially post-

menopausal. But I do encourage providers to look at the research, look at the literature, and maybe consider, especially in that late perimenopausal phase, consider giving estrogen in addition to progesterone, just to really help that progesterone, that woman feel the progesterone's effects.

Jaclyn Smeaton (19:25 - 19:28)
I love that. But I think- one.

Kelly Ruef (19:28 - 20:12)
Okay, so the second one, and I was like, does everyone, did everyone know this? Like, how do I not know this? I thought it was really interesting that if you add on estrogen therapy, you can decrease the ups and downs or like, how do I say this? So you know how we have the estrogen swings, estrogen roller coaster during perimenopause. If you add on estrogen therapy, sometimes that can lower the difference between the lowest estrogen and the highest estrogen point. And sometimes just by lowering that swing in estrogen, how much estrogen increases or decreases, that can really be helpful for women symptomatically.

Jaclyn Smeaton (20:12 - 21:16)
Yeah, that's such an interesting point to talk about. And it affects not just perimenopause, but even like menstrual migraines and PMS, PMDD. Like there's such interesting data, because sometimes it's not the hormone level, it's the way our body is responding to a change in the hormone level. And there is circumstances like menstrual migraines is one where the trigger is the change, not an absolute value. Like the absolute value can differ from woman to woman.

Even hot flashes, they don't have a level like an estradiol level that hot flashes start or stop at. Like no literature has found that. We don't really understand when it's triggered for each individual woman, but it's obvious. It's probably related to the magnitude of change from a high to a low. and so, yeah, I think thinking about the utility of estradiol therapy or ERT is really interesting when you're thinking about like smoothing out the roller coaster to make it into a smoother drive.

Yeah, that's a great point to bring up that I think a lot of people don't think about, especially if estrogen's high, thinking like, I'm gonna put them on estradiol when estradiol's already surging.

Kelly Ruef (21:16 - 21:20)
Yeah, yeah, exactly. What about you?

Jaclyn Smeaton (21:20 - 23:26)
Oh, that's such a good question. I think that probably the biggest takeaway in this, this goes into, mean, we made an HRT, like a hormone therapy, menopausal hormone therapy

course, and then a perimenopausal hormone therapy course. And I think the biggest takeaway for me is that when we look at the data on outcomes with things like cardiovascular health, breast cancer, um, even the studies on dementia, which we don't have a complete body of data. So what I say could be very wrong on that in five or 10 years.

But what it looks like is that preserving a of a continual exposure to hormones is where the most benefit is versus stopping and then starting at some future point in time. And so that makes me think about the current guidelines, which say you're in menopause 12 months after your last menstrual period. And that's when you would seek care and get on hormone therapy. However, you're actually, you're in menopause after your last menstrual period, you just don't know that was your last one for 12 months. And so that's at least a year that most women wait. And remember, only 5 % of women in the United States are on any menopausal hormone therapy. That number might be increasing with more attention to it now. However, most women have a gap. And when you have a gap in hormone exposure, your receptor function changes, the cells change. And I just learned this in a book I'm reading about like, reproductive zoology, that the estrogen receptor was the first, they believe developmentally, estrogen was the first compound to stimulate transcription of DNA in males and females evolutionarily. This is like kind of before there was sexual differentiation. So that's super interesting because every cell has estrogen receptors that we know of, and it's obviously super powerful and receptor function really matters.

I think my biggest takeaway there clinically is like we really should be thinking about perimenopause and helping women get started with this thought process and decision making in perimenopause.

Kelly Ruef (23:26 - 23:45)
Wow. Yeah, I totally agree. And even if we're not using estrogen, sometimes just working with the estrogen receptor. So going to our friends, the phytoestrogens can be helpful during that time. So soy from a good source, ground flax seeds, red clover.

Jaclyn Smeaton (23:45 - 24:10)
Definitely. Yeah, definitely. So another thing that I think about when I think about kind of those important insights and things that are surprising is, you know, maybe you can share as a reminder or as new information for people, where do we get our hormones from as we shift from cycling to postmenopause and where does the adrenal gland and HPA axis fit in?

Kelly Ruef (24:10 - 26:49)
That's a really, really good question. ~ Because, so a lot of us know that our ovaries make estrogen and progesterone and testosterone and androgens. And a lot of us know that when we get closer to menopause, our ovaries don't make as much estrogen and

progesterone. But one thing that we don't really realize is that, so when we hit menopause that estradiol and that progesterone production from the ovaries really declines really rapidly but testosterone doesn't and So I see this on the DUTCH test. Sometimes if women had a complete hysterectomy, they got their ovaries removed You will see pretty low androgens Because their ovaries are no longer there to make testosterone. So testosterone we get that gradual decline as we get older and if you get your, I think the research was if, if you have a, an oophorectomy, so you get both your ovaries removed, your testosterone will plummet about 40%. So our ovaries not making progesterone and estrogen in post menopause or menopause, but still making some androgens like testosterone. But really the, the focus kind of moves from the ovaries over to the adrenals when we hit menopause. Because the adrenals, those two glands that sit on top of our kidneys, they make a lot of our androgens. So they're making the majority of our DHEA, 100 % of our DHEA-S, and they're also making testosterone and androstenedione.

So it's really important to...work on our adrenal health, on our HPA access health as we go through perimenopause and as we hit menopause. Because if we're burning ourselves out and if we've got poor HPA communication, we've got low ACTH, we've got low cortisol output, we've got low DHEA production, we're gonna go into menopause with low androgens. And the point I guess I'm trying to get at is in menopause, most of our estrogen comes from DHA that came from the adrenals. So adrenal health and androgen levels are so important to maintain as we go into menopause if we want to have estrogen around.

Jaclyn Smeaton (26:49 - 28:13)
Yeah, it's fascinating because I know some cultures and most traditional tribal cultures that still exist, but even some westernized countries like in Japan, the rates of symptoms through the perimenopausal and menopausal transition are so much lower and in some cases, nonexistent. Cessation of menses is the only reported change. So it leads you to think, well, what's different?

And then of course there could be genetics or epigenetics, nutrition, there's a lot of changes. But I also think about our stress exposures. And I really think that perimenopause and the late reproductive season is a really important time to be thinking about helping women make sure that their HPA access is optimized. And you mentioned it, that...this is a really hard time in life for a lot of women with layering on challenges. You might have like kids going to school or you might be having kids for the first time, you know, and then you have aging parents and you have job stress, marital changes. Like there's so much that happens during this time in life that if you're not set up for success, it can lead to a harder menopausal transition. And we've seen that through like anthropological and medical

research and I love that you explained why. mean, it's that connection to our source for hormone building blocks, really.

Kelly Ruef (28:13 - 28:36)
Yeah, 100 % and fat tissue. You need fat tissue because the DHA, the androgens, the androstenedione that comes from the adrenals has to aromatize in the fat, mostly in the fat tissue to estrogen. So, uh, and women who are really lean have a low body fat percentage. tend to see lower androgens and lower estrogen in general.

Jaclyn Smeaton (28:36 - 29:08)
So I'm glad we're talking about this because this isn't a side in the course. It's not the focus of the course, but we have a lot of resources on HPA access support with DUTCH and our DUTCH education at DUTCHtest.com that I would take a look at that in all of your women and like make it part of the protocol and part of the assessment. And we do talk about that in our cases because there's some interesting cases where we see changes to the HPA access, changes to cortisol ~ production and metabolism, that impact the way that women are feeling, for sure.

Kelly Ruef (29:08 - 30:12)
Yeah. And one example is high cortisol. Like just imagine a perimenopausal woman who may be from psychological or work stress. She's got high cortisol. And then let's say that she's got aging parents and kids that she's raising and she has a lot of responsibilities and she's not making time for herself to exercise or to weight lift. So let's say her muscle mass is declining. Her cortisol is high. You know, that just sets women up for insulin resistance, for weight gain, for low energy, for mood issues, for hot flashes. Yeah, high cortisol can affect hot flashes. ~ Even cardiovascular disease. I mean, the list goes on. So for me, I think it's so important to look at adrenal function along with the sex hormones when you're evaluating those perimenopausal women. Because your cortisol can like, also make and break how you're going to feel in 10 years, 20 years, 30 years.

Jaclyn Smeaton (30:12 - 30:56)
Now, let's talk a little bit about what's included in the course, Nuts and Bolts. So this course is available. It will be in the provider portal, and you have to be a registered DUTCH provider. So you have to fill out our Become a Provider form, which is just the basics. You can get that on our website, DUTCHtest.com. And then once we verify your license, you'll get an account set up. And when you get an account, you can click on Provider Portal. That's there that you can get all this awesome education. You can order test kits. You can have...kits drop ship to your patients. You can set up consults with our doctor team. Everything's there in the provider portal. And this is available there too. So the course is

called Peri-Metapod Management. So within the course, we have five lessons and we've touched upon the topics in the first lesson. Right, Kelly?

Kelly Ruef (30:56 - 31:13)
Yes, the first lesson goes all into the physiology of perimenopause in detail and it even touches on other things like menopause and POI and endometriosis and uterine fibroids like very, very briefly, but it's pretty comprehensive.

Jaclyn Smeaton (31:13 - 31:33)
Yeah, super, and we also cover what are called the straw criteria, which are the kind of conventional diagnostic criteria that you can utilize based upon lab testing to learn what stage of perimenopause your patient's at, which I think a lot of providers don't know that that research even exists. So I think you're gonna learn a lot there. Our next lesson, we move into lab testing.

Kelly Ruef (31:33 - 31:58)
Yes, lab testing. we don't, so of course we go into how to utilize the DUTCH test, how to use the DUTCH complete or the DUTCH plus. Also the cycle mapping. Remember the cycle mapping. We look at progesterone metabolites and estradiol and estrone throughout the collection periods. You can see like a month's worth or one cycle worth of data, which is very cool, especially in perimenopause.

Jaclyn Smeaton (31:58 - 32:03)
I'm doing mine right now, by the way. Are you? Maybe that'll be another podcast episode.

Kelly Ruef (32:03 - 32:07)
She's talking about a result.

Jaclyn Smeaton (32:05 - 32:07)
The embarrassing review of my results,

Kelly Ruef (32:07 - 32:47)
My god, my postmenopausal estrogen. ~ So lab testing, not only do we go into DUTCH, but we go into serum, mostly serum. And then of course we talk about AFC that you can see through ultrasound. But it can also be important to tie a DUTCH test in with a serum FSH or a serum AMH or inhibin B. So we go into all the details around what lab tests you might want to consider, when you might want to do them, and what they can tell you and how they trend over time, depending on what stage you're in.

Jaclyn Smeaton (32:47 - 33:32)
Yeah, one of my favorite things about the course is we give you a bunch of different examples of cycle maps that you might see for women in perimenopause. Some of them

are pretty wonky. Like you have peaks all over the place that don't line up with the cycle, but that is a pattern that we see in perimenopause. And really we go into depth teaching about why that's happening. What's the physiology behind it? How can you tell what's happening in the ovaries based upon these wild and crazy cycle maps that sometimes come out? And then most importantly, what do you do from there. our third lesson is on perimenopause lifestyle and supplement support. Focus on things that are non-hormone therapy related, so not HRT. So can you share a bit about what's covered in that lesson?

Kelly Ruef (33:32 - 35:16)
Yeah, that's probably the most extensive lesson. It's the longest one. And we really do go into like an overview. So when you hit perimenopause, what are just overall things that people can do to improve their health, which of course includes exercise, not only cardio, but strength training. We need to really build up that muscle mass or maintain it over time. Cause as we get older, it gets harder and harder to build up that muscle mass. And let me tell you, most of our mitochondria are in our muscle.

So our muscle helps with our energy levels. It helps with our metabolism and improves our insulin resistance. But I'm getting sidetracked. ~ know, diet, there's some research on the Mediterranean diet, but we really emphasize whole foods, like not ultra processed foods type diet, anti-inflammatory diet. The Mediterranean diet has a lot of omega-3 fatty acids too. Quitting smoking, lowering alcohol intake when we're in this phase of life, it can be pretty challenging. And a lot of us want to go home and have a glass of wine, or we want to go out on the weekend and have a glass or two of wine. a lot of women, I won't say all of us, lot of women become more sensitive to alcohol during this time. And it can cause a lot of disruption. ~ But besides the overall, the general approaches during perimenopause, we've really focused in on a few of the specific symptoms. let me see if I can remember them all. But breast tenderness was one. vasomotor symptoms, so hot flashes, vaginal dryness was another one. Do you remember the other ones? was their brain fog, brain fog.

Jaclyn Smeaton (35:16 - 35:18)
changes.

Kelly Ruef (35:18 - 35:35)
heavy bleeding, mood changes, anxiety, depression, yes, brain fog, cognitive decline. So we really like zeroed in on those specific symptoms and signs and given people some more natural approaches or supplemental approaches to treat.

Jaclyn Smeaton (35:35 - 36:37)
Yeah. Now, one of the things I haven't mentioned yet is that the course is like taught by myself and also Pippa Campbell. So Pippa Campbell is a nutritionist in London. And the

reason why we invited her to teach this course is perimenopause is really the majority of her practice. And she teaches or she manages and supports women through only lifestyle therapy. So this is exactly why we picked someone who's not doing hormone therapy because she's learned and has a very successful practice. She's learned to help women without the use of hormones. And we want to really show, and she really was instrumental in helping us highlight the way that lifestyle medicine and the way that supplementation can really help during this time to the point where you don't need hormone therapy. So just a shout out to Pippa. I'm sure she'll be listening to this as well. You're going to love listening to her in the course because she has this beautiful posh London accent as well.

Kelly Ruef (36:37 - 36:52)
And she of course presented the third lesson on the lifestyle and the supplemental approaches and I loved like she just like threw in little clinical pearls here and there and so I was just fascinated watching the recording just like I felt like I learned even more

Jaclyn Smeaton (36:52 - 37:12)
Yes, me too. Yeah, me too. So then our last two lessons move into hormone therapy options, which we also wanted to make sure we covered. And because there's not super clear guidance out there, we really did our best to make suggestions on where you might start based upon your patient's results. So tell a little bit more about our last two lessons.

Kelly Ruef (37:12 - 39:01)
So lesson four goes into the risks and the benefits of HRT. We kept that one pretty short because in our introduction to HRT course, we go into that in depth. So if you really want to understand the risks and the benefits of hormone therapy, I recommend going to the introduction to hormone replacement therapy course, the DUTCH course, and the provider portal. But it's interesting because perimenopausal women, they tend to be younger than menopausal women.

And they tend to be maybe in better health overall. So hormone therapy in that perimenopausal population tends to be even safer than in the menopausal population. And we already know it's pretty darn safe in the menopausal population. But when we go to lesson five, this is when we get into the nitty gritty details of actually using hormone therapy in perimenopause.

And lesson five is also like pretty lengthy lesson because we wanted to make sure that we gave examples and that our providers really understood like in which instances you would just use progesterone or when you might consider adding on that estradiol therapy. But in general, in early perimenopause, when we have more heavy bleeding, breast tenderness, our cycles are seven you know, cycle length difference is seven or more days. We might

tend to use just progesterone. We might cycle it just to oppose those proliferative effects of estrogen. ~ and one thing I wanted to bring up is in perimenopause, that risk of endometrial hyperplasia and cancer goes up at no wonder, cause we have a lot, you usually tend to have estrogen excess and not a lot of progesterone.

Jaclyn Smeaton (39:01 - 39:08)
And that's not even considering addition of hormone therapy. That's just general based upon the hormones we make ourselves. Yeah. Yeah.

Kelly Ruef (39:08 - 39:41)
So I mean, in my mind, progesterone sounds like a great option to lower that risk. But as we get closer to menopause, as people might have guessed, that's when we start thinking about adding on estradiol therapy. Because estradiol therapy can be so helpful for women's insomnia, for their brain fog, for their skin health, for their hot flashes, for their vaginal dryness. Like you could get so many benefits.

from that estradiol therapy and from starting it before you actually are diagnosed with menopause.

Jaclyn Smeaton (39:41 - 40:14)
Mm-hmm, fabulous. Yeah, and so that's how we wrap the course, and it's been five lessons. Most of them are just under an hour. The hormone therapy risk and benefits is only about 20 minutes, and then the hormone therapy one, like you said, Dr. Roof, is a little bit longer to go through all the cases. I think from a learning perspective, there are some really great key takeaways that practitioners are going to get out of this course. Why don't you share what you think the biggest takeaways are or reasons why people should watch this, of course.

Kelly Ruef (40:14 - 41:08)
I think a lot of us, even a lot of us in the women's world, a lot of us who see perimenopausal women. We know things to do. We have treatment options that we've learned about, but I learned so much from this course. And I think I read through the slides twice, and I watched the recording, and I'm going to watch it again, because there's so much information in there, and there's so many clinical pearls that I think even if you're an expert in perimenopausal health, you're still going to learn something. And so that was kind of, I think, the big takeaway is that I think this course can be helpful for everyone, whether you're beginner or whether you're pretty experienced in the care of a perimenopausal population.

Jaclyn Smeaton (41:08 42:48)
Awesome. Well, I really appreciate you joining me today on the podcast to talk all about our perimenopause course. We are so excited to see this launch. It'll be live in June, early June. And, ~ again, just as a reminder, if you want to get access to this course, it's free. There's no charge for this course. You can find it in our provider portal at DUTCHtest.com. You need to just sign up to become a provider with DUTCH. And then once you do, you unlock the keys to the portal castle and all the juicy things inside. ~

Dr. Ruef also mentioned our Introduction to HRT course, which is for menopausal hormone therapy. That is another maybe six to eight hour course taught by myself and Dr. Carrie Jones. Really rich with information. go hormone by hormone, formulation by formulation, route of administration, dosages, everything, and then how to use a DUTCH test to provide hormone therapy in a really personalized way. And then you can find, of course, this perimenopause course that we've been talking about. Dr. Kelly, thank you for your time today and also for the literally hundreds of hours that you put in. And I'll give another shout out to Dr. Miller that she put in to develop this course. It was so fun. like I said, I can't find any course covering this material out there. And we've looked. So I think for practitioners, you're going to find this is really completely new and filling a huge gap in your women's health and hormone education. So we hope you check it out. If you're wanting to learn and really expand your expertise in hormones, you're not going to want to miss our podcast. So make sure you tune in each and every week for our new content.