### Episode 120 Transcript

Dr. Jaclyn Smeaton, ND (00:06.946)

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. Welcome to this week's episode of the DUTCH podcast. My guest today is Dr. Laura Briden, she's a naturopathic doctor and former evolutionary biology researcher who has really studied the impact of hormones in women's health and looks at it from a really unique perspective. Today we're going to talk all about the menstrual cycle.

why access to our own production of hormones is so critical for our health, both our short-term health and our long-term health with conditions like osteoporosis and metabolic health. And really Dr. Brighton has a really unique perspective as an evolutionary biologist, really understanding why it's so important to be cycling, why it's so important to understand your cycle and improve your hormone literacy, and even why women live this long lifespan past menopause.

It's only humans and killer whales, I think, live that long and go through a menopause. But she really does talk about why that's so important for our species and why we evolve that way. She's a wonderful guest. Dr. Briden brings an extensive amount of background, three decades of clinical experience in women's health. And really, she's been completely focused on menstrual, hormonal, and metabolic issues with that integrative and naturopathic approach. She's authored three bestselling books.

the period repair manual, the hormone repair manual, and metabolism repair for women. She currently resides and consults in Christchurch, New Zealand, and she's on several advisory boards, editorial boards, all focused around women's health, research, and education. I'm really excited to get started. Let's go ahead and dive in. So Laura, I'm really excited to have you here on the DUTCH podcast today. Thank you so much for being here.

Dr. Lara Briden, ND (02:20.28) Thanks so much for having me.

I always like to start because we speak with such interesting people with this connection to integrative and functional medicine and you're trained as a naturopathic doctor as myself, but can you share a little bit about what brought you here? Like how did you get to this place where you're a naturopathic doctor focused on women's health? Our listeners love to get to know our guests like this.

Yeah, so actually a big part of my backstory is that before I trained as a natural genetic doctor in Canada, was working, trained as and working as an evolutionary biologist and even published a peer reviewed paper, like 30 years, more than 30 years ago on sex differences in foraging behavior in animals. So I was always looking back, I was

always so interested in female physiology. I sort of had a recent opportunity to go back and read some of, just my published paper, but some of the university papers I was doing. And I was like, wow, I was just right from the beginning, like in this process of framing female physiology as kind of the standard normal version of mammal physiology and males, the kind of quirky variant. And of course I brought that into.

work as in health, because as you know, I mean, a big thing that's happened over the last forever really is that, you male physiology has sort of been the normal and then women are considered different only in terms of periods or breasts or just a few things, but actually we're different at every level, like every cell. So it's, yeah, it's just a never ending source of fascination for me. I'm very curious about biology, which I think has

#### Dr. Lara Briden, ND (04:05.218)

driven my work. I'm also very curious about people's stories. So I do, I still do some patient work, even though I don't do that full time anymore, because I just can't. I love like later today, actually, I have a full day with patients just to get there, sit there and listen to their stories and their questions. And yeah.

Have you read Lucy Cook's book? just came out last year. It's like, it's called, I have to like, they're gonna have to bleep this out. The book is called bitch, but it's all, she's an evolutionary biologist and it's all about the, all about like female species and how kind of a merge. This is like such an off topic aside, but I think you love it. She's really funny of an

author, but it's probably a lot of the things that you studied, but it's talking about like evolution of the female species and actually.

evolutionarily, they believe that females kind of came first before males, which is so interesting. And then, well, this is what she explains in one of her book. And then she talks about all of the ways that females are thought to be culturally like less aggressive, or they are the ones who are pursued. And she goes through species by species, all these anomalies. It's really, really fascinating. You'd probably enjoy it. came out last year.

Yeah, I think I have heard of that. I've read some other, yeah, there's some other sort of similar books that came out around the same time, but I will definitely check that out. Yeah, mean, women are not passive. We have our own aggressive tendencies. There's actually, I mean, it's actually quite a lot of within women, a lot of kind of intra between women competition, which is we don't like to talk about because we love love to think that we have this, you sisterhood. But yeah, there's some, you know, some

It's true.

Dr. Lara Briden, ND (05:43.714)

dark aspects. And sometimes you looking at biology, there's always some things that we don't want to say.

Well, I know this is like not the topic of the reason why we brought you on today. We want to talk about periods and hormones and all this great stuff. Of course. But I really appreciate the background that you came from because it's...

Mm-hmm.

really, it helps you understand kind of where we are today biologically and why things are the way they are. And even some of the competition that you speak of, how that serves us in some ways and how other times it doesn't. think when you look at it from evolutionary biology and anthropology, you can see patterns that really matter even on the individual patient level.

There's this great quote, and I've forgotten who it's by, but it's quite famous. People could look it up. It's called, nothing in biology makes sense except through the light of evolution, through the lens of evolution. And that's true for health as well. would say I've been for a

number of years. I was a member of a evolutionary health society here in New Zealand. We were a group of doctors and nutritionists and scientists and other clinicians just all compiling our knowledge into seeing health.

Dr. Lara Briden, ND (06:51.264) in that way. And yeah, I found it very meaningful.

That's great. Well, I want to start with the importance of understanding our hormones. You use the term hormone literacy and why women really need to understand what's happening hormonally. Can we just start there and you talk about why this is such a passion for you?

Yeah. Well, the original term, mean, hormone literacy has a nice ring to it as well. There's an older term called body literacy, which came out of the fertility awareness area based methods. It was actually coined by an Alp Canadian friend of mine, Laura Werschler. And body literacy is knowing if and when you ovulate, which is very foundational because a lot of women

today, a lot of women do know. Certainly there's a lot of women who are very keen on tracking cycles and hopefully the naturopathic doctors listening to this are all over that. But more broadly, in terms of many doctors and certainly scientists and journalists, ovulation has not been on the radar as something as central as it is. Because just to put it bluntly, regular ovulation is how women

make hormones. So at the end of the day, this is we make estradiol, our main ovarian estrogen on the way to ovulation. We need to be progressing to ovulation to actually get that proper pre-ovulatory peak of estradiol. And then obviously the only way to make progesterone is to ovulate. And that is just a foundational piece of

### Dr. Lara Briden, ND (08:33.695)

human female physiology that has unfortunately been largely left out. And one of the ways that it's been left out, it's impossible to talk about ovulation and how important it is for general health, not just for making a baby. But it's impossible to talk about that without talking about the era of contraceptive medication that we've just come through that we're still in, although I think we're in the tail end of it now, where it has been considered fine and normal

to routinely switch off ovulation. So switch off the hormonal system of hundreds of millions of women, including young girls, and just have, there's a lot been a lot of wishful thinking kind of going, that'll be, you know, it's going to be fine. It'd be good enough. We're going to switch off estradiol and progesterone, which as you know, have very specific effects in the body. And we're going to replace those with ethanol, estradiol, synthetic estrogen, which is actually kind of like estradiol.

And then plus one of many progestins, are so different from progesterone that it's just heartbreaking actually, just the difference in all sorts of things. mean, progesterone, real progesterone has benefits well and beyond preparing the body for pregnancy. It obviously affects the brain. It converts to a really fascinating neuro steroid called allopregnanolone, which no progestin does. Real progesterone is very important for bone health, which I know we're going to touch on today.

It's an immune modulator. For generations, we've been robbed of it, collectively.

We were actually on our education team meeting today, a of doctors talking about how we should be developing allopregnanolone as like an OTC drug. You can just go in the store and get it to get all the benefits of that progesterone metabolite because it is so potent. It's funny that you bring it up today.

# Dr. Lara Briden, ND (10:23.914)

Yeah, well, it's, yeah, it's very, it is very important. And actually, as you probably know, you might have even talked about in your meeting, there has this, there's a number of scientific papers using progesterone and therefore it's metabolite allopregnenolone for traumatic brain injury in both sexes, actually. So there it's, it's that important for the brain that it's, it is on the radar as a brain medicine.

Yeah, I've learned that actually, Paul Anderson teaches that for TBI like in men, but a lot of the cases he works with are in men and it's quite high dose, but really amazing outcomes. Yeah. So when you look at like women oftentimes, one, they don't know a lot about their menstrual cycle or about ovulation. you know, I hope that that's changing. But I think the foundational education, I think it's actually social media and kind of consumer driven education versus like a systematic.

process. think, you know, there used to be women used to live with other women. I think they probably got that in more of a handed down generational education. It's not

translated to like our school systems as effectively. It's really more sex education versus menstrual cycle and hormone education. I love your thoughts on that.

#### Yeah

### Dr. Lara Briden, ND (11:41.364)

Yeah, well, exactly. mean, if you think about how revolutionary would it be to teach girls that ovulation is how you make hormones that developing, know, by developing, mean, maturing into a healthy, regular, natural menstrual cycle is going to make you healthier and stronger, like even potentially, you know, stronger in athletic performance because estradiol, mean, ovarian estrogen is anabolic and

improves performance and it's going to improve mood and it's going to, I mean, if we, that would be, yeah, be, you know, very important for, as part of the whole sex education picture, instead of like almost from out of the gate day one, it's like, ovulation is something to be feared because you could become pregnant. So we need to, you know, shut it down. It's very much been considered expendable. The metaphor I often give is if we were to

you know, do the same for men, it would actually just be gobsmacking. if you if you were to, know, obviously, we know how important testosterone is for boys and men, and and for women to, of course, women have testosterone as well. But if you were to say to them, it's like, Look, you know what, you don't need your testicular function until you're ready to make a baby. So we're gonna give you this medication to switch that off.

And instead of testosterone, you're going to have this medication that's kind of like testosterone, but actually a little bit more like estrogen. And so it's going to affect your metabolism and your mood and everything. And don't worry about it because that's what everyone does. That's, this has sort of been the paradigm we've not sort of, this is the paradigm we've been in. And even, mean, I've been speaking this way for decades, but as I get older, I'm just getting more and more like just.

you know, astonished by what has actually happened. This really does feel like an emperor's new clothes situation where we've future generations are going to look back and think, what the heck were they doing? You know, we look back at medicine from 70 years ago, like, wait, why were they doing that? you like, why? So why did everyone think it was fine to just switch off women's hormones for decades? Yeah.

Dr. Jaclyn Smeaton, ND (13:57.24)

So tell me more about the why behind that. From your point of view, of course, oral contraceptives or even, I guess, are not always oral, even hormonal contraceptives, let's call it more generally, serve a purpose to help women prevent pregnancy when it's unwanted. But you're talking about the fact that there's some undesirable effects of that. What have you seen or what are your chief concerns and what does the science say about what we should be worried about?

Well, as you know, the science has been very slow on this. and the, okay, so just to acknowledge, yeah, it was a radical thing to legalize a medication that could prevent pregnancy. we can't, you know, I don't diminish that. I think that has been important for women, for society potentially has had some interesting effects on society has probably been actually quite a quite a big event.

Yeah, it's really changed a lot of things. in terms of like, the medication was invented, if you think about it this way, back in the 50s, essentially, it came to market in the 60s. But it was invented before, really, there was much understanding of the menstrual cycle. mean, hormones themselves had only been discovered a few decades before. Like, they literally just discovered hormones and it's like, let's decide how to interfere with them, basically, let's decide how to shut it down. they

I mean, it wasn't the new invention wasn't coming into a place of knowledge. always sort of speculate if it were first proposed today, do you know, use synthetic hormones in this way to shut down women's own hormonal system? I think it would be quite shocking. I think people would be like, that doesn't wait, that doesn't sound right. So, I mean, just to put it in context, we are 2025 now. And so there are other ways to avoid pregnancy. I mean, we can

We don't have time to go into all the different methods, but I'll just say there are some new male methods coming. There's a new, it's called a vasoclusive. There's a new essentially reversible vasectomy that's an injection of a temporary gel into the vas deferens that is, I wrote about it years ago, but it's finally, it's undergone its first level of clinical trials. You know, they have to go through two or three, however long, I think that's.

#### Dr. Lara Briden, ND (16:17.974)

I think this latest speculation is it might come to market in 2027 or 2028. It was clinically trialed in Australia, which I love because obviously I'm connected to, even though I'm Canadian, I've been down under for a long time. So of course the Australians would step up

and do the clinical trial on this. Of course they would. And so that's encouraging. mean, questioning hormonal birth control does not have to mean questioning people's rights and ability to avoid.

to plan their own pregnancies. in terms of science around what the side effects are, like there's been a lot of just head in the sand about this. I mean, we literally had decades. Like I've got an old quote from Margaret Atwood from one of her books in the seventies talking about the mood side effects and everyone reporting the mood side effects. That was like in 1972 or something. She wrote that, then meanwhile, like it wasn't until 2016.

that there was the needle moved at all in terms of any kind of acknowledgement that yes, these medic contraceptive medications negatively impact can negatively impact mood. That was all just considered. It was like, no, no, it's, know, you're just imagining it. It was like just like decades of just scientists and doctors saying, yeah, there's no proven link there. That has really changed. So I have just

You know, I recently spoke with some people who were upset about a bit of pushback they'd had, you know, criticizing the pill. like, this is nothing. 10 years ago on Twitter, you could, I could not, like no one could put their head above the parapet and say like, actually progestins can cause anxiety or increase the risk of depression. That was immediate slap down. That was immediate. You know, that's, they didn't use the word disinformation back then, but you know, that's not allowed. And then in 2016, there was the famous Lancet study.

of the, it was a Danish study. was, I think it was the Lancet of Hope I've Got the Journal Right. It was a very famous study. was one point, they looked at 1.1 million women, their medical records, and they found a significant small but significant trend to being prescribed antidepressants after all types of hormonal birth control, especially the progestin only ones. So that was

#### Dr. Lara Briden, ND (18:39.726)

pretty hard to ignore at that point. That was a watershed moment actually in this conversation. And of course it's not just mood. There are a number of studies also suggesting that putting girls on hormonal birth control, especially the combined ones that really suppress estradiol will prevent them from achieving peak bone density, which I know we want to touch on osteoporosis today. So I'll just say like achieving peak bone density as a young woman.

the foreshadowing of later conversations.

It's hard, of course, because you're talking to like a 20 year old. It's like what it's hard to say what you know, what you do now is going to affect your bones when you're 75. I mean, it I get the disconnect and it's, hard to have that conversation, but bone health actually starts in your teen years.

Well, I'm really thankful for this conversation and I come to it with lot of curiosity because I think certainly I have a lot of respect for the benefits oral contraceptives have provided and I also see that they're used and applied in ways that I don't think follows the therapeutic order when it comes to me as an atropathic doctor. They seem to be the cure for every ailment in women's health.

any kind of hormonal abnormality. I had secondary amenorrhea or primary amenorrhea. had like one period and then never got it when I was a teenager. And so when I went into the doctor, this is what led me to be a naturopath at the watershed moment. I remember going in and she was a really thoughtful nurse practitioner, women's health nurse practitioner. And she said, okay, well, we're going to give you like a pill to start your periods. And that's, I wasn't looking for birth control. It wasn't sexually active. It was just like, let's get your, get you cycling. And then I said, well, what about what I want to have kids like

# Dr. Jaclyn Smeaton, ND (20:28.91)

Don't you want to know what's wrong? And still we have other medications we can use to help you when it's time to get pregnant. And to me, that was a real eye-opener because the way my brain always worked was if there's a problem and this is something that my body should be doing, I want to understand why it's not doing it and I want to fix the root problem. And that wasn't the response I got from that provider that day. And it was really impactful to me. And I see it applied in that way for a lot of heavy bleeding, menstrual irregularity, endometriosis.

You name it, we use OCPs as a prescription for that. And I think we are oftentimes doing a disservice because we're not investigating the root cause. And now we're starting to understand a little bit more about root causes and what else we can do. But ultimately it's really interesting. And I'm excited to talk about this on the podcast today and really talk about some of the longer-term impacts. That's not the way that I think about it. I think more like, is this the best tool? Does it solve the problem or is it just a bandaid fix?

Well, band-aid is the word. I mean, there's no question that contraceptive medication, I don't call them hormones because I mean, they are technically, mean, hormones in the broad sense, like they're hormone-like, but you they're not, I tend to use a different word for them because I think most people just assume they're hormones, like the actual estrogen, estradiol and progesterone in these medications. It's not, especially although some types do have body-identical estradiol, but none of them have progesterone.

But yes, there's no question they can relieve some symptoms. They don't always, they're not a guarantee, but I mean, certainly they can suppress or mask symptoms associated with the menstrual cycle, which is not a surprise because they shut down the menstrual cycle. So one thing, just one point that I will just touch on, because this is definitely when I'm speaking with my patients and my readers and interacting with people.

The moment when people understand, especially young women understand that the pill cannot regulate their menstrual cycle, it really is a moment for a lot of women, like just sort of shock and betrayal. I think the stats are that actually, of all the women who take a combined method, an estrogen method of contraceptive medication with induced bleeds,

### Dr. Lara Briden, ND (22:54.9)

All the people who take those one in three take it to regulate their cycle because of cycle irregularity. Now, as you know, it doesn't do that. I mean, a menstrual cycle is by definition, a series of hormonal events of which ovulation is the key event. to just shut down the hormonal side of things completely, and then induce like an induced

uterine bleed for no reason is not meant like there's no medical reason to bleed monthly on those methods. It's totally a smokescreen. so when that when people really understand they're like, wait, what? why am I having these monthly bleeds on? Like, what is even happening here? Has that fixed a problem? I mean, there can be certainly there can be an argument for inducing a bleed if someone who's you know, has a thickened uterine lining or something and you need to induce bleeds somewhat.

occasionally, but this doesn't have to be monthly. The monthly was always just to mimic a natural cycle. Again, going back to the 50s and 60s, those scientists didn't think it could regulate the menstrual cycle. That narrative about regulating the menstrual cycle was actually put forward as a way to promote, get the pill legalized because it was illegal. Yeah, it was illegal at that time, not that long ago.

# or good marketing.

it wasn't legal to take a medication to avoid pregnancy. I mean, this is obviously progress has been made. And so they were like, wink, wink. It's not for that. It's just to like give you a healthy menstrual cycle. they knew what that's, I mean, right from the get go, they knew that's not what it was doing. It was always just kind of, well, everyone understands that's not real, but that's what we're going to say. And now that's what it's prescribed for. Like I just.

### Dr. Lara Briden, ND (24:48.512)

I mean, like I said, the longer I go on with this, the more I'm just like, what have we been doing? This is such a strange, such a strange thing to have come through. But I mean, just to also to put it in context, mean, the modern methods, so I will just here touch on the hormonal IEDs because they're obviously very popular. I think part of the swing away from combined estrogen methods of contraception are actually to swing to

hormonal IEDs, because they're popular. But one thing about them, they have their own set of side effects, actually. They can affect mood and skin, and they can cause like breakouts and hair loss and stuff. they, for what it's worth, they don't always suppress ovulation. So they can permit, they can avoid pregnancy, you know, lighten flow, achieve some of the goals, but they, depending on the dose of the medication,

like the brand, like the type, the age of the woman and how long since insertion that will sort of depend on how much progestin she's being exposed to. And some women can ovulate through...

Body weight as well right? weight.

All various factors. So some women can cycle through that. even if even if because the uterine lining has been suppressed to the point that they might not see bleeds, but they could still be cycling is actually a very unusual situation. It's one of the only times when you can cycle without having a menstrual bleed. By cycle, I mean, ovulate regularly. So people can women can track that by tracking body temperatures potentially. So just to compare and contrast the two things. with combined methods like the combined pill,

Dr. Lara Briden, ND (26:31.778)

patch, new ring, things like that. women are bleeding, but not cycling, which is pointless. With weirdly with the hormonal IUD, you can cycle but not bleed. it's actually the of the two is the pre it's the preferable one. And that's not to say that, again, that hormonal IUDs are not they're not without their own side effects. But they are a lot of number of my patients do use hormonal IUDs. And I get it, like, you know, they can dramatically reduce flow and

At least they're still making, in many cases, some of their, you know, enough estradiol and progesterone to promote general health, to promote metabolic reserve and good bone density and things like that.

So let's talk about this and talk about when you're thinking about the hormones and why they're so important. Why is menstrual cycle? Why is the ovarian time production of estradiol? What are like the top three things you think this is really important because it helps with? I mean, know there's a million things on that.

We could do a little love poem to Estradial right now. Let's hear it. Like a little sonnet. mean, it's amazing, obviously. It supports mitochondria, it's anabolic, it reduces cardiovascular risk via several mechanisms. mean, there's a lot of research to suggest that...

sorry.

Dr. Lara Briden, ND (27:58.562)

the estradiol exposure we get during our reproductive years significantly reduces women's risk of heart disease, insulin resistance. It's good for the brain. It's like good for bone health. What would you add to that, Jappin? All the many benefits of

mood stabilization, bone protection, there's so many things.

Dopamine.

Yeah, it's pretty great. And like I said, the synthetic estrogen in the pill is not as strong. It's not as good in those. It doesn't deliver the same benefits. It does deliver some, it has some of the same benefits, but not to the extent, particularly around metabolic health. So it's pretty clear that the right amount of estradiol improves metabolic health, insulin sensitivity, whereas ethanol estradiol does seem to have some

negative metabolic effects, which is sort of a compare and contrast. And then of course, there's progesterone, which deserves its own, you know, love poem. has all, you know, many, many benefits as well. I think I mentioned some of them earlier, primarily, well, many things, but it metabolizes to allopregnenolone, which is the brain is expecting to have, let me, let's face it from an evolutionary perspective, the brain is expecting to have allopregnenolone.

### Dr. Lara Briden, ND (29:17.866)

in women. Like it's expecting it to have at every cycle, huge amounts with pregnancy. And to just turn off the tap on that neuro steroid completely for decades is having an impact. mean, I think that's, I mean, we know, we started to know details like women on hormonal birth control have different brain structures compared to women who cycle naturally, there's gonna be lots of reasons for that. But I think allopregnant alone is one of them.

So yeah, and progesterone, it's also, I mentioned it's immune, it's immune modulating. So it can help to reduce the risk of certain autoimmune diseases. Yeah. I mean, I'm a, I'm a big fan of progesterone as well. call it the Cinderella hormone. It's the one that kind of didn't get invited to the party. It got really left out of the party. you know, estrogen at least even conventionally has had some accolades, but progesterone is like, it's disposable. We don't, don't really need it.

Yeah, it's funny, internally, we kind of call it the princess hormone because everybody always wants to talk about progesterone. I think estrogen actually doesn't get enough of the spotlight. I'm like, estrogen is kind of like our Beyonce of hormones. You really want that. It's true. need it. But it gets a little bit maligned with the progesterone princess in the room.

Well, that's, that's just from a natural health perspective. this is, yeah, I mean, this is coming at it through our fields. I love it. Beyonce. I call it in my book, I call it the queen hormone. I mean, there's no question. mean, estradiol is amazing. I won't swear, but like, it's like, yeah, it is amazing. And it has gone through certainly in natural health has been this, I don't actually use the word estrogen dominance because for various reasons, which we, I've written about, or people can, we can

chat about it a bit,

Dr. Jaclyn Smeaton, ND (31:05.868)

We can talk about it. Let's talk about that. I completely agree. I think it's not a scientific concept.

It's not a term, it's not a medical term. It's primarily, there's a couple of things going on with it. I think we'll just talk about estrogen a little bit. I mean, I think mostly it's used to describe unopposed estrogen. So obviously when cycles, which are super common, anovulatory cycles are cycles where progesterone is not kicking in properly. And so I'm a hundred percent on board with that. Like I think that women do need both. They need that progesterone phase.

to counterbalance estrogen for lots of reasons. mean, breast health and various things. So there's no question that having all estrogen and no progesterone is not ideal, but I still don't use the word estrogen dominance because it's just too nebulous, it's too vague. It also kind of has a negative built-in connotation that estrogen's bad, which as we've determined, it's not. Also, I think women, some women do experience...

quite negative symptoms from their estrogen peaks. And so I think that's partly what that term is evoked invoked to describe. And I think some of that is some women get quite a strong histamine reaction to estrogen. And that's really to do with immune system. Let's see that through the naturopathic lens, this is about, you know, considering the body as a whole and looking at, you know, how our immune actually our immune function, our immune situation.

really does quite strongly influence how we respond to the normal ups and downs of both estrogen and progesterone actually so I think that's partly where it is but the other thing the development on the scene is that we went through a time when especially in natural medicine where estrogen was kind of considered bad which I never agreed with in fact I have a 20 I think it's like 2011 blog post called in defense of estrogen is like come on now we need to I I even like the image is a Queen.

#### Dr. Lara Briden, ND (32:58.318)

like this is an amazing hormone. But then we've gone into, of course, we're in the perimenopause space now where there's been this people trying to, it's a reaction to the decades where women were too afraid to take estrogen in menopause for menopause. And which was not good. You know, that we that sort of a whole, it's a whole story. But so then there's been this resurgence of estrogen is

super beneficial. Now there's like in certain circles, depending on who you're talking to, estrogen can do no wrong. Like it can fix everything. It's like it fixes, you know, ADHD, it fixes like, you know, bone and health and mood and just whatever's going on is like take some estrogen to fix it. I mean, this is, and this, but the weird disconnect about that is like, that's all around paramenopause and menopause. So then there's this sort of been this narrative, which I find very jarring somehow.

from the age of 45, estrogen is amazing and you can't live without it and you must take it. To be fair, I take estrogen. So I'm not saying you shouldn't take estrogen, but then at the same time, there's this still relic of, yeah, but before that, when you're in your 20s and 30s, it's fine to shut it all down with hormonal birth control. I mean, to be clear, most methods of hormonal birth control switch off estradiol. And so...

why I'm just like, well, why is estradiol important in your 40s, but not in your 20s or your teens? so it mean, obviously, it's important at every phase of life. And we do with with menopause through my evolutionary biology lens, we do menopause is not an accident of living too long. We are. We did evolve actually menopause and we did evolve to have a lower estrogen state phase of life.

It's not zero estrogen actually, it's still quite a lot of estrogen around.

Dr. Jaclyn Smeaton, ND (34:51.638) What's the evolutionary benefit of menopause from your background?

Well, you're giving me an opportunity to talk about all my favorite things. So this is all come if people want to look solid reference for this, there's a book called The Slow Moon Climes that written by a historian, sort of anthropologist, and I was heavily influenced by that book. It had a big impact on my perimenopause book, Hormone Repair Manual, and she builds the case. It's quite a dense book, but I love that sort of thing with my science background.

She builds the case. It's not that it's actually not so much that menopause evolved. It's that a longer human lifespan evolved past reproductive capacity. So I think it's possible. I mean, she talks about the different aspects, but I think it's possible our ovaries can only keep going to 45. Like that's possibly just a thing. and, but

Yeah, although there is there's little glimmers of that there, you know, could be. Yes, I mean, think most people can agree by 45, though, unless some future intervention can change that the ovaries are pretty much done. But what the way evolutionary biologists see it is what's weird. It's not weird that we stop by 45. That's probably hardwired. What's weird is that we keep living for another 40 years.

pool, right? there's definitely.

### Dr. Lara Briden, ND (36:16.372)

And we always have by always, I mean, probably as long as we've been human, like it's not new. The narrative that we all used to die by 45 is incorrect. That was a statistical thing. Like when you back in the day, when you had one in two babies dying, unfortunately, it's like, yeah. But you all, if you look back in the fossil record and even just historical record in cemeteries, there women getting to not 80 or 90 years old. mean, that's not.

knew they were lucky to escape infection, child infection and death and childbirth and all the things like it was not was unusual to get to that age, but the biological women could always get there. so in the book, The Slow Moon Climb, she builds the case that which is actually really fascinating that a longer human lifespan for both sexes evolved or was selected for because women

in their post-reproductive years, in their 50s, 60s, and 70s, are so incredibly beneficial to the family group, like just crazy off the charts, that those long-lived genes are going to be selected for, because obviously then she's around and then her offspring who have those long-lived genes are around. she just like, she draws on all sorts of evidence, but like primarily you look around modern day forager people, and they have these numbers, like the

people get like gathering the most food and kind of holding it all together and really like getting it done are the women in their 50s, 60s and 70s. Like they gather more food than any other demographic. The men are sitting around the fire telling stories and the women are like, let's, you know, get this sorted. And the analogy is a metaphor with, not metaphor, it's like, it's a parallel. Of course, killer whales or orcas have similar structure and what they, if you really

dig down and I won't spend too much time on this because obviously I'm very excited about this topic. But if you really dig down what actually menopause evolves or a longer

post reproductive lifespan evolves when adult sons stay with their mothers. So it's like, at some point, the woman actually kind of switches to being kind of vicariously male because she's promoting the reproductive success of her sons and possibly daughters as well. the

Dr. Lara Briden, ND (38:36.746)

In orcas, of the things that matrix do is try to prevent their male sons from fighting so much. I just love that.

as a mom with four boys at home.

Okay, there you go. So yeah, that's the that's the basic argument. And so this narrative that menopause is an accident of living too long, I really like there's very few things out there that because I mean, I've heard it all. But like, when I hear that narrative on social media, I'm just like my, my, yeah, my back goes up.

That's very little in science is accidents, right? We'll be right back.

If you're a clinician seeing more women in their late thirties to early fifties who don't quite fit the typical menopause profile, but are clearly not feeling like themselves, this is for you. We're thrilled to announce the release of our new course, perimenopause management. This is a comprehensive evidence informed course designed to help you identify and address hormonal shifts before your patients reach menopause. You'll get clinical tools, treatment strategies, and real world case examples to elevate how you support women

Dr. Jaclyn Smeaton, ND (39:44.408)

through this often overlooked transition. Make sure you're a registered DUTCH provider to gain access to this free course. Visit DUTCHtest.com to become one today. We're back with the DUTCH podcast. I want to switch gears and talk a little bit about some of the reasons why hormones are so important and some of the more specific applications. So let's start by talking a little bit about bone health.

in osteoporosis. so I think most people are aware that estrogen is really important for bone growth. But you talk about a lot of other hormones that we don't always think about besides estrogen and other factors that are overlooked, especially during perimenopause, other factors that are overlooked as kind of a piece of the puzzle when it comes to osteoporosis. Can you start by just giving us kind of the overview?

So let's do a little mini masterclass on bone health. I'm sure you can chime in here with various things. Two important points to understand about bone health. One, it's a long-term project. It starts in the teen years, as I mentioned earlier, and that achieving peak bone density is huge. It's actually difficult to overstate how important that is. that would, would achieve, have the strongest bones they're ever going to have by about 25 or 30 years old.

and the second thing point about bone health is that bone is living dynamic tissue. is affected by so many things. It's also arguably it's very bone tissue, bone cells themselves, especially the osteoclasts are very cousins of immune cells. So the immune system has a huge, huge role in bone health, which is one of the reasons that immune conditions like celiac disease can have such a negative corrosive effect on.

bone health. it really is, I mean, everything in health from a naturopathic perspective is troubleshooting the whole picture, but bone health truly is. Like if there's an underlying inflammatory condition, then that needs to be addressed. There's several medications that can quite negatively affect bone. And I'll just mention them while I'm thinking about them. One is the PPIs, the proton pump inhibitors. It was always

### Dr. Lara Briden, ND (41:56.934)

The bone risk was known with those. was like, it's because they impair absorption of minerals. It's more than that. They're doing something to the actual bone cells, the dynamics of bone cycling and resorption and deposition. also SSRIs, there's been for a while a signal in the research suggesting that SSRI antidepressants can have a negative effect on bone, probably because of the effect of serotonin directly, which is quite troubling.

It's an example of all the details that we've sort of collectively kind of hope are going to be okay. And then we find out. Yeah. So, but in terms of hormones, there's all, you know, all the hormones affect bones. estrogen is, estrogen is quite famous because it slows the osteoclasts or the cells that are chewing up bone. And it does that. There's no question about that. It's very important for bone health, but

On the other side of things, androgens or testosterone is quite important for both men and women. It stimulates osteoblasts, the cells that deposit bone. The other hormone that stimulates osteoblasts is progesterone. so progesterone has been also off the radar.

Another example of the Cinderella hormone, it's just been forgotten about in the bone conversation. But my close colleague,

Professor Jerelyn Pryor, who's a reproductive endocrinologist in Canada. Some of your listeners probably have heard of her. She's done a number of papers on the role of progesterone in bone health. And yeah, and so she's essentially established the fact that having regular natural ovulatory cycles where you make progesterone helps to build bone through life. And also it does, it also gives a sort of another tool potentially, because progesterone can

For those women who maybe can't take estrogen in the, you know, once they reach the point of perimenopause, menopause, and they're reaching the point of faster bone loss, that progesterone can be something to consider there. So can androgens. I'll just give a plug for DHEA. If you remember, like about 15 years ago, DHEA was really, like it was on the radar as a potential treatment for some of the symptoms of

# Dr. Lara Briden, ND (44:19.79)

perimenopause, menopause for improving bone health. And then it just got dropped. I mean, I guess it had must've had some negative studies where they decided to forget about it. But I actually still think DHEA is quite an interesting hormone.

My first time using it was actually I was working in school on a shift for HIV positive men and it was profoundly impactful for their quality of life. Now it comes so long. So, so far in the treatment of HIV, it was an amazing natural tool that was really improving sleep, cognition, energy levels. It was really very impactful. But you're right, we still talk about it a lot at DUTCH.

We talked about it lot because I do think probably like you, there's still so many benefits and especially with testosterone being a DEA restricted drug, DHA is a great precursor that can help with that kind of building of androgens in women who are low.

I And I actually think it's a better option. I mean, just to segue a little bit into the question of whether to supplement androgens with menopause or post-menopause. I mean, think if you're going to, actually think DHEA is a better option through my lens. One of the problems with testosterone is that, I mean, it's great. Obviously, it depends on you. If you dose it at the right amount and properly balanced by estradiol and progesterone, it can be

okay. But one thing to have people should remember about testosterone in women in the female body is it...

to any degree of testosterone excess will promote visceral fat and insulin resistance. The literature around that is really quite clear. I mean, that's, you know, in terms of the big, when we consider how important metabolic health is and how widespread insulin resistance is, that's, I sort of feel like prescribing testosterone, should be done very carefully.

Dr. Jaclyn Smeaton, ND (46:10.21) That's interesting. Does it do the same in men?

no. So as you know, mean, men, men actually, again, it's all context.

Usually it's associated with a lower body.

Exactly. So men in men in the male body testosterone will in through different mechanisms enhance, you know, improve insulin sensitivity, improve muscle mass. That's one of the ways that it obviously improves metabolic health. But in women, it's yeah, we have a well, different reaction. No, I mean, it's yeah, I mean, we can see that it's in the literature pretty strongly. So we know that obviously the androgen excess associated with polycystic ovary syndrome

promotes insulin resistance. It becomes a vicious cycle because then insulin resistance promotes androgens as well. In my perimenopause book, I have a short section on the relative androgen dominance of the later phases of perimenopause. Once progesterone and then estradiol drop away, then androgens start to shine through, especially when SHBG goes down. then women are exposed to more testosterone with menopause, postmenopause. That's why, I mean, it's just obvious, right? That's why we get

Dr. Lara Briden, ND (47:16.386)

more facial hair, you get the thickening. In fact, sort of visceral fat is also called androgenic fat, or this is an androgen shape to have that kind of square waist. yeah, I mean, I've written quite a bit about this, that's where I think, yeah, I mean, back to the point of androgens are also important for bone health.

insulin, I mentioned insulin resistance, it can be very corrosive to bone health, partly because it promotes what the researchers call anabolic resistance in the bone. when, insulin is actually normal. Insulin is also a growth hormone. It's important for normal signaling of bone growth. But when there's resistance, it sort of that fails. so we do, I mean, because of the growing awareness of the impact of metabolic health on everything,

you'll hear different conditions called type three diabetes. So dementia potentially has a strong component of metabolic dysfunction. I've heard osteoporosis called the same thing. it's, yeah, improving metabolic health can make a big difference for bone health.

So you mentioned this earlier, but like when you talk to women who are in their 30s and 40s, even younger, you know, how do, how can we encourage women to more actively take steps to improve or protect their bone health? What are the ways that you've found to help people understand what matters? And I totally get it. It feels like that only happens to elderly people. And I'm not even close to that. I don't have to worry about it.

I know. Yeah, and of all the tissues in the body, right? Bone has the longest story arc.

Dr. Jaclyn Smeaton, ND (49:04.238) It's a slow film, it's like a art film, it's not your action film.

Right. Yeah. Very slow art film that takes 80 years. you, I mean, you could change the nervous system. mean, obviously things, many tissues can be imprinted or they can have something that, you know, got set up early and can take a while to change. But I mean, I just feel like other tissues like the nervous system and the immune system are more dynamic and the gut certainly is pretty dynamic and can change. But bones, that story of your bones in your forties is just a continuation of the story of the bones in your

20s. I, in terms of your question, like how do you inspire women to really care about their bones, young women, my feeling, I mean, having after decades of talking to women about it, I don't even try really, you know, I just focus on what their current proximate concerns are. So I'll be like, you you, you can definitely frame it as, you know, you need estradiol and progesterone for

physical fitness, you know, for good muscle, muscle health and metabolic health in the moment and for mood and things like that. I just think that's probably a bigger motivator.

What do you think? I mean, if you had any luck talking to younger people about, you know, preventing a condition that's going to happen in 50 years.

Yeah, no, I think I take the same approach you do, which is, I think about this too, because like with fertility in men, the pre pubertal period, like ages 10 to 15, 10 to 14 is like another critical period for their fertility, where you need to like avoid toxins, avoid, you know, cell phone radiation and all the radiation, eating clean, eating well, it's probably the hardest group to

# Dr. Jaclyn Smeaton, ND (50:49.622)

try to get to have healthy behaviors. mean, they live on like burritos and soda, right? As much as possible. same kind of thing. It's, think, unless you have lived it, like you have a parent who had a fall, fractured a hip, has osteoporosis, it's hard to make it feel real for you. So I think the same, like focusing on what's in front of them and really around the, maybe bringing it back to the importance of that healthy menstrual cycle and why all the hormones are so beneficial.

with the side effect of healthy bones into your old age. But I think the other pieces of it, adding weighted vests are very popular right now. And I think that's another benefit to bone. There's things that you can do today that are trending or that are more, I guess, interesting than just prevention, something that feels so far off.

Yeah. And one thing about actually just things are changing in a good way. So it's not that long ago. The culture in elite sport was that girls lose their period when they're athletes and that's fine. That's normal. And so that there's been a lot of people working to change that behind the scenes, just really pushing like, it's not okay to lose your period. It's not okay from a health perspective, from an immediate health perspective and obviously

from a longer term bone health perspective. And just to be clear, I mean, one thing that's really changed in that space is even 10 years ago, like there was this idea that, you just take the pill and it'll fix it. But actually what we know from, we know, I'm pretty confident about this, the oral contraceptive pill does not protect bones or help bones in young girls the way.

having a like, it's not as good as having a period. And also if I guess if they're really in a situation where they just can't get their period back, the interim measure now, at least in the UK and down here, it was like in the US, but the gold standard practice is actually body identical hormone therapy for those young girls, like well, young women. So that would be

proper estradiol patch, you know, utergestin, or like, sorry, permetrium, you know, proper progesterone. So that's been a big

# Dr. Lara Briden, ND (53:05.15)

shift. And that's sort of part of the growing awareness that actually, surprise, surprise, young women need hormones. And yeah, so that's, that hopefully will lead to future improvements with bone health. Yeah, and nutrition, obviously nutrition as well. just fully being fully nourished with everything, including protein, not just calcium, right? Like the bones aren't just a repository of calcium, like they need

They're super dynamic, so they need enough protein. They need enough, I'll just give a plug to, I mean, everyone knows vitamin D, but vitamin K2 is really important for bone health and zinc and yeah, all the things.

Yeah. Great. I think that's really helpful. The last topic I really want to dive into today is around insulin resistance, which you've talked about a couple of times, but

You've been talking more about metabolic health and insulin resistance in women and insulin hormone. know our blood sugar regulation is done by hormones. And I think I love the way that you embrace that as a kind of in the female hormone conversation. Cause I think there's not a lot of people who are doing that. So why are you including that in this kind of female hormone conversation and tell us a little bit about what is important about that.

Yeah.

#### Dr. Lara Briden, ND (54:25.164)

Yeah, great question. So in my third book is about metabolism repair for women is all about insulin resistance. And in the introduction, I talk about why, you know, why does a women's health expert go veer into metabolic health? Well, I I consider it actually going deeper. Because, as you know, like, metabolic health, which is quite a vague, broad term, I realize that, but it's it's so central.

to everything. It's very essential to a lot of aspects of women's health as well, like being able to ovulate regularly. And it's, yeah, I've tried to reframe it as insulin resistance as a, well, it is a hormonal condition. I think when you put it in those terms, it sort of maybe stick, it sort

of makes a bit more sense to people because, and one of the things I'm trying to, in future presentations and interviews, I'm trying to sort of shake off the old.

association with blood sugar, because that's just one small part of it. you know, yes, does. Insulin does help to regulate blood sugar clearly. I mean, it's, it's a mate, one of its mate. It's one of its big jobs, but it's not its only job. And insulin as a hormone is quite unique in that it interacts with almost every tissue in the body. And the main feature of insulin resistance is having chronically elevated insulin, and that is not good. So we just talked about how that's not good for the bone health.

that, you know, that can create anabolic resistance in the bone. It definitely can create energy deficiency in the brain. One of the things about chronically elevated insulin is that it directly impairs the body's ability to access body fat for energy. So it can create the situation where you're not only gaining weight, but you can't even tap into your own fat stores to have the energy you need between meals. So you kind of just get locked into carb burning. get locked into this, you know, cycle of

in many cases, low blood sugar and needing to eat a granola bar just to get through the afternoon. it's a very, I mean, that's not a pleasant place to be for people. with the extra layer of, I mean, if you think about those symptoms, that being hungry all the time and getting drops in blood sugar, if you think about it, those are symptoms of a hormonal condition, insulin resistance. most people just, especially women, just internalize that as, that's just me, I'm a

#### Dr. Lara Briden, ND (56:50.302)

know, bad person. I don't have willpower. can't, you know, I can't eat what I'm supposed to. And so I've, yeah, my third book was trying to reposition that and trying to really, I feel very strongly that the collective shift insulin resistance that's happened over the last 70 years, and it's, it's astronomical, like, it's really bad. staggering. That's the right word. It's absolutely staggering. That is not

people's fault. mean, there's through no scientific lens is that people's fault. you know, scientists know this, it's like the environment, the food environment change.

and the environmental toxins are absolutely wrecking our metabolism.

So it's a combination of the exactly. So in fact, one study I quoted the book, I cite in the book estimated that probably about 15 to 20 % of the epidemic or the metabolic epidemic and metabolic dysfunction is directly attributable to environmental toxins. So clearly that's not people's fault.

low because I mean the data, I wonder if that's more about your own individual exposure because if you look at exposure during pregnancy, the outcomes of the offspring are huge. Like I just remember like the epigenetic study, it was an agouti mice. So this is not a human study, but there were two

# Dr. Jaclyn Smeaton, ND (58:13.466)

there were two mice, like two groups of mice genetically identical. One was exposed to folic acid. The other was not, and they were both in a BPA and containing environment. And one of them, like the mouse that got folic acid, the offspring did not develop insulin resistance and like the body, you know, obesity and things like that. The mice that didn't get that nutrient did when the, not the mice, when the mother, the offspring did. And it's really fascinating when you look at

Yeah. Nutrients, efficiency, and exposure to endocrine disrupting compounds and the impact on metabolic health of offspring long term. I mean, it's pretty scary.

It is. And it's good that you bring up the epigenetic aspect. I'll just touch on that briefly. I assume our listeners all know what that means. There'll be like inheritable exposures that are passed on. So that's not just from environmental toxins, that'll be from our food environment as well, various genes being up and regulated up and down, passed on. That's why, again, it's staggering that the epidemic of

metabolic dysfunction slash insulin resistance is, is amplifying every generation because it's being passed on. It's, it's epigenetics and it's in utero sort of programming. And so now you have kids with fatty liver disease and, you know, quite advanced insulin resistance, which was unheard of like even 40 or 50 years ago, even those of us in the seventies who ate, I mean, my diet wasn't that bad, but like, you

Oreo cookies. mean, even the kids, like kids were eating a lot of junk food back then too, but they weren't succumbing, like they weren't developing these complications the way kids are now. And that's a lot of that's from the epigenetics. So it's going to take

generations to unwind this. There's not an easy fix, which is hard to write a book about something with, for which there's not an easy fix.

Dr. Jaclyn Smeaton, ND (01:00:11.342)

Because you don't have that plan in your last chapter, there's no appendix with a supplement regime to fix it up. Yeah.

It's like, you'll be fine in four weeks. all good. No, it's like, it's, it is. And it's very, there's a deep, which I try to acknowledge in the book, like it's, it's deeply unfair. It's deeply, deeply unfair how some people through various luck in their, you know, generational exposures or genetics to some extent, some people will have been less, less vulnerable to this onslaught.

than other people and yet you know they're made to believe it's like they're doing everything right but I mean is it that or is they just they just got lucky and you know some people are 4 or 5 generations in to being pushed deeper and deeper into insulin resistance it's it's very unfair and it's yeah it's quite heartbreaking actually but I mean it doesn't mean it's nothing to done there's still ways to you know start to.

reclaim our birthright of a healthy metabolism and healthy insulin sensitivity.

Well, I want to end on just one question, which is around testing. Of course, that's what we love and do. So bring it back to where we started from with kind of this desire to understand our hormones or need to really understand our hormones. Can you talk a little bit about the role that blood testing has in that for women? Obviously, we can track our menstrual patterns and that's foundational, but

Dr. Jaclyn Smeaton, ND (01:01:40.894)

Are there things that you can pick up on lab testing that you can see that you're headed towards dysfunction before things get too severe? Or is there any benefit to that from your point of view?

I mean, I do quite the lab testing. do a lot of, mean, keeping in mind, so my, my patient population is not in New Zealand is, you know, middle income. I am very conscious of, testing costs for sort of been, I think over the years I've been doing it, you know, trying to stick with some of the less expensive testing. I do my starting place is usually some of the standard.

parameters, like I'll give you some examples. I do do quite a bit testing around insulin resistance, which we just spoke about. So I'm not just testing insulin or HOMA IR index. I mean, that's a possibility, but also looking at things like fasting triglycerides, ALT, like an elevated ALT when the other liver markers are normal is pretty classic sign of insulin resistance. In women, it should be less than 19.

The ratio between triglycerides and HDL, there are awesome ways, like we can use some pretty simple markers to start to gain a picture of metabolic health on that side of things. And then I also do thyroid, I mean, thyroid, we haven't even touched on thyroid, but thyroid's hugely important for women in particular.

And as particularly thyroid autoimmunity. So I almost screen for thyroid antibodies, not every single case, but I actually find TPO antibodies, auto antibodies quite helpful. It paints the picture of if they're positive, it doesn't necessarily mean they have Hashimoto's full blown, but they have an autoimmune tendency picture that can imply something about, you know, how important it is for them to avoid gluten. For example, I often do

Dr. Lara Briden, ND (01:03:30.19)

look for ice cream for celiac serology, celiac genotype. Look at iron studies and B12 and some of the ones that are unfortunately missed. yeah, and I'll just say a word on B12. I mean, I think there's an optimal range of the units would be the same down here, but I think B12 should be greater than 300. I think there's a lot of people walking around there with subclinical B12 deficiency and that's...

a big player in mood, symptoms, migraines, dementia risk, things like that.

Well, we've covered a lot today and learned a lot. It's been really wonderful to talk with you. So I really appreciate you taking the time and joining us.

Yeah, I always love talking with fellow naturopathic doctors. we're a particular tribe and I can always tell when I'm speaking with one. It's great. It's been great to meet you.

Thank you. It's to meet you as well. And if people want to learn more about you, what are the best places for them to visit your website, social media, et cetera?

Dr. Lara Briden, ND (01:04:30.55)

Yeah, I'm super easy to find. My website is larabriden.com and all my social media is at larabriden. Yeah, and I've got the three books. I'll just quickly say periodoparamenual, hormonoparamenual, metabolism, repair for women.

Fabulous.

Dr. Jaclyn Smeaton, ND (01:04:45.474)

Great. We'll make sure we link to those in the show notes. Thank you so much, Dr. Briden, for joining me today. Take care. Thanks for joining us on the DUTCH Podcast. Join us every Tuesday for new conversations with leading functional health experts. If you like what you've heard, be sure to like, follow, and subscribe wherever you get your podcasts.