Introduction and guest background

Welcome to this episode of the PCOS SOS Summit. I'm your host, Dr. Felice Gersh. With me today is Dr. Jaclyn Smeaton, and she wears many hats. The one that we're going to kind of have her wear today is the one where she's the chief medical officer for precision analytical.

And we're going to talk all about some of the really well, precision type, really critically important lab testing that applies to women. But we're going to focus on women with PCOS.

Now, Dr. Smeaton is a naturopathic doctor and I mentioned she wears many hats, so she has her own private practice. She teaches all over the world. In fact, we have shared stages.

We're having one coming up. And she's also involved in all kinds of health policy organizations. So she is one busy lady. So I can't thank you enough for taking time out of your busy life to join me and and really help all the women out there to know how to access and how to utilize lab testing to help them on their journey for healing with PCOS.

So welcome and please tell us how you got into all of these different areas like and your so like expert in so many areas of female health, fertility, all aspects of reproduction, genital urinary.

So what was the motivator and your history and story? How did you get into this? And then we'll do a deep dove into all the the lab testing. Well, thank you so much for having me here, Dr. Gersh And likewise, part of my learning process has been reading all of your fantastic books and being inspired by physicians like yourself who also have dedicated their lives to helping women.

You know, my story, much like many practitioners, especially integrative or functional medicine practitioners, starts of my own health journey. I remember as a teenager I never got my period, so I had that primary amenorrhea picture and I was probably 16, 17 years old.

My mom said, okay, we should send you in to see someone. We'll figure out what's going on with this. And when I went in to see this nurse practitioner, she'd said, Well, not to worry, we'll put you on birth control pills that'll help you get your period and you'll be fine.

And then I said, Well, what about when I want to have children? It was in my you know, I was only 17, but I knew I wanted a family later on in life. And I said, Don't you want to know why I'm not having a period?

And she said, Don't worry about that. We have fertility drugs for that later. And that really seeded a mission in me because that felt so unsatisfying even at the age of 16 or 17.

And and the more I looked into it, the more I realized that the conventional medical model didn't really have a lot of other tools to help women like me really get to the root cause of what was going on and that the understanding of what was going on was really just at the beginning.

And so I really had a strong interest in going into medicine after that point, really for the opportunity to change the way that doctors looked at health care for women and really looking at finding the root of the problem, finding the solution so that we could do things that should come naturally on our own without the assistance of medication.

And that's what led me down the path of Naturopathy Medicine and really into women's health, where I focus my practice today. You know, my practice now is with fertility primarily, but I get to work with hormonal imbalance and female reproductive health and male reproductive health day in and day out.

Well, we're certainly glad you went on that journey, and I hope you had kids end up happy. Do you actually have a

big, bustling family? Well, that's great.

And I know you're helping women all the time. And one of the areas is when you were the head of chief medical officer. So tell us a little bit about what you do in that role and then tell us about the company and the tests that they offer.

I'm excited to share about this. So in my own private practice, working with hormone health so much, one of my favorite tasks that I would work with with patients is called the Dutch Test.

And this is a test that I use in addition to blood work, you know, and blood work gives you like a snapshot because it only tells you what's happening in that very moment.

When you draw the blood, you can measure hormone levels. Now, you can imagine that, especially when it comes to hormones in a cycling female hormones change every single day of the menstrual cycle.

Dutch testing and hormone overview

And not only that, they change hour to hour. In fact, even a hormone we think of as being kind of stable, like testosterone in men, it varies like 30 to 40%, depending what time of day you measure it.

So blood is so helpful, but it doesn't tell the complete picture. So I was using this test called the Dutch test, which is primarily urine based, and that helps you look at hormone levels, hormone metabolites, which tells us what happens after you make the hormone, because a lot of metabolites are active in the body and behave a lot like the true hormone.

And it also measures that more or over the course of the entire day, because with urine you are getting, you know, the delay. It's like collecting hormones over and over again in your urine for hours before you urinate and collect a sample.

So it's a really nice way to get a more broad picture of hormones. And then in addition to that, the panels I was running also looked at your adrenal gland function or your HPA axis.

So when it comes to hormonal health, there's so many contributing factors and this Dutch test tells a more complete picture for females. And a lot of practitioners use this test in their practice.

I know we've talked about it before and that you've used it with some of your patients as well and it really is helpful when it comes to figuring out that root cause.

So when I was invited to fly out and meet with the team at Precision and see the lab, I just really clicked, you know, as a customer, I was already really loving the product they offered.

But then when I realized their dedication to science and their commitment to really finding the root cause when it comes to hormone imbalance and additionally just their mission as a company and as human beings doing good work in the world, it was so inspiring and I was lucky enough that they invited me to join their team.

And I have always wondered about this. So what does Dutch stand for? So it stands. For, yes, dried urine testing for comprehensive hormones. And really that sums it up.

It's an at home test that patients can run. It's very easy. You pee on a piece of paper. It's about the same as doing an ovulation kit or a pregnancy test.

And then you let it dry and you mail it in some of the tests. Also do a collection of saliva, which again can be done at home, but it's a measurement in urine and it looks at that comprehensive hormone picture.

So we look at estrogen, progesterone, testosterone, and then a lot of the kind of precursor hormones and

metabolites of that. So you really get that full idea of what's happening both in hormone production and elimination.

Well, let's talk about the different hormones. So how did they select which hormones would be part of the test? And how does it specifically maybe help women with PCOS?

So we are looking at metabolites in urine and some of the hormones can be directly measured in urine. And for others, like progesterone, we can only measure metabolites.

So how we decided, which we would have in the test first, starts with what do doctors need to see clinically? You know what information is important for them to help understand what's happening with a patient's case.

So that's of course, the first step is figuring out what would we like to have if we could wave a magic wand? What information do we wish we could have?

Then we have to look at what can be tested accurately. And I'll mention that precision, you know, makers of the Dutch test are very committed, just like the name.

Precision in the name. They will not run tests that they can't prove are valid with research. So an example of this of that, even though we do saliva testing for cortisol, which is very, you know, well-documented in literature, we don't do saliva testing for reproductive hormones.

And this is controversial in the integrative medicine space because a lot of providers promote it. But both of what we have looked at in published literature, as well as what we've tried to do in our own lab, we just can't get good results.

And other studies validate that the results are just not reliable or not relevant to a patient's case. So we stick with urine now we look at progesterone by looking at two metabolites.

This is a big one for females with PCOS because if you don't ovulate, you don't make progesterone. So there can be kind of a chronic progesterone deficiency in women with PCOS.

We also look at estrogen three different kinds of estrogen and many, many metabolites of estrogen. Now this gets really interesting and I'd love to hear your thoughts on how you utilize this, too.

But the metabolism of estrogen really can impact overall estrogen levels and feelings of estrogen dominance, which again, are really common for many women with PCOS because you are not eliminating it or because it gets recirculated.

It can feel like you have too much estrogen in the body. And this test helps to determine whether it's true that your estrogen is too high or whether your estrogen is normal, but your metabolism is sluggish and you're just not getting rid of those estrogens efficiently, which can be a lot of things.

Gut health, genetics, nutrition, so many things can impact that. Or do you use that when you take a look at that test? Sure. I mean, we know that not only are many of these active, but some of them the metabolites are really critical to health.

Like when I was doing my own little personal deep dove, I found out that to meth, oxy estradiol has receptors specifically for that metabolite of estradiol in the heart, you know, so these are not, you know, like side lined players.

Some of them are really, really important. And of course, you know, I want to ask you, like, what does it tell you about what's the cause of metabolism problems like the gut, the liver, like how do you use some of that information in like a myriad of ways to help create a therapeutic plan for your patients?

Well, we can see different steps in the metabolic process. So when it comes to metabolizing estrogen, there's

several phases of that. The first phase we call phase one and that's where, you know, not to get too much into the chemistry, but the hormones get an age group, a hydroxy group added to them.

That primarily happens in the liver. But the problem is that those metabolites end up being sometimes more harmful than the original hormone. Many of them can be toxic to our DNA and to our cells.

So they have to also go through phase two metabolism, which involves methylation of that metabolite. A lot of people have probably heard about methylation because we talk about like methyl folate and methyl B, you know, B12 and B6.

We need a lot of methyl groups and those help to protect our DNA.

Estrogen metabolism and gut health

And in this case, they actually transformed the hormone metabolite into one that's water soluble. And those hormones need to be water soluble to get out of the body.

Now, at that point, you get those hormones get kind of tied up in a package with a little bit of a bow on top and shuttled out to the gut so that they can be eliminated.

Some come through urine, obviously, that's our measuring and other hormone metabolites come through our stool and that's how they get out of our body.

But the gut is so important because if you don't have a strong microbiome, there are certain kinds of microbes that actually can cut that ribbon. It's an enzyme called Beta Glueck.

You're on a days and they'll cut the ribbon which allows the box top to open up and those hormone metabolites to kind of come out and be available to be absorbed back into your bloodstream and really have to start all over again.

And so it involves liver health, kidney health and gut health in order to properly metabolize hormones. And with the Dutch test, we can actually measure each step along the way.

So it helps us see whether the problem is with phase one or more commonly with phase two. That's a really common place where things kind of get stuck because genetics can dictate methylation, but also nutrition.

And so we can tell exactly what types of therapeutics would be helpful to help estrogen metabolism in a patient. Now, we also last year added a new marker called indication.

An indication is actually the first gut marker that we have on our test. And it goes up in instances of dysbiosis of the gut when you have kind of those unwanted microbes in the gut, it's not specific, doesn't tell us what microbes, but we know that there's dysbiosis there.

So that can give us a little bit of a window into that elimination phase and tell us whether we need to maybe do a little bit of work on the gut to make sure that that estrogen is actually able to leave the body.

Well, that is, you know, really fascinating. And we know that women with PCOS almost always have dysbiosis and they have very high rates of nonalcoholic fatty liver disease.

So, you know, you were, like I said, so many hats. So in your practitioner wearing hat, the days when you get the Dutch test, how, you know, do utilize this information for each individual patient who is seeking to enhance their fertility, they want to conceive.

So maybe like run through like an example of say you get a patient who has PCOS, she gets the Dutch test and you find, oh my goodness, you know, she has like these markers that show that she has dysbiosis.

She's not metabolizing estrogen properly. So now you have this information. So how do you use it to then, like you said, use the natural therapeutics to help these women?

Mm hmm. That's a great question. And we haven't even talked about what I think are two of the most interesting parts of the Dutch test, specifically for women with PCOS, which are looking at androgen levels, because we know in PCOS women have higher androgen levels.

And with this test, we can actually again see a little bit more about the metabolism and what might be going on in Y and similar to estrogen. Testosterone has metabolites that are very active in the body and then they have metabolites that are kind of more quiet.

And it can be genetics that can also help to dictate what type you make. We call them alpha and beta metabolites. So if you are metabolizing down a pathway where your metabolites are really active, that's something that we can use nutrition to shift right?

We also actually we haven't published the data, but we published an abstract showing that there are different metabolite patterns seen in women with PCOS that actually might assist with diagnosis in those cases where it's kind of fuzzy because when we think about PCOS, I always call my patients.

It's not I don't think of it as a syndrome. I think of it as a spectrum because the symptom picture and the diagnostic criteria are a little squishy. And you can see women where when they get out of balance, their pattern moves towards PCOS, even if they don't quite yet meet the diagnostic criteria.

But those metabolite patterns are pretty unique in women with PCOS. So that's another kind of interesting piece that that we have come to find on the Dutch test.

Now, the other piece is you've already mentioned the gut. We've mentioned estrogen and progesterone, but we haven't talked much about the HPI access. And that's also a critical piece of the Dutch test for females with PCOS, because we can see things like how much DHEA you're producing as well as how your adrenal glands are functioning, how your HPI access is functioning in general.

And for some women with PCOS, it can be a little bit more adrenal driven and for others it could be more related to blood sugar or of your ovaries, you know, not converting testosterone into estrogen as effectively.

So with the Dutch test, particularly with women with PCOS, it gives us really holistic picture that can point me as a practitioner into the direction of what approach might be most helpful for that specific patient.

Because as we know, when you're working with women with PCOS, it is not one size fits all when it comes to coming up with an effective treatment plan.

You know, I was going to ask you, like you get so many tests in that this would be the ideal sort of scenario in terms of like what unique markers are you finding perhaps in women with PCOS that set them aside from other women?

So I'm really excited that you already thought of this and that you've been now collecting that data, because I think this is like really, really important and like looking at it like, is there a difference between the lean PCOS women?

How much of it is related to perhaps obesity versus having the other, you know, issues that women with PCOS have? How can you distinguish? And then of course, the ultimate is how do you use this information to help the patients to achieve better health and achieve a pregnancy if that's on their wish list?

So this is like really amazing and maybe you could talk a little bit specifically in women with PCOS. What kind of issues do you kind of see with the access and maybe explain what is that a little bit more?

And and how can that matter? Yes, I'd love to talk about that. And I think that boy, the last like five, 3 to 5 years, it's

been so refreshing to see the way that stress is talked about in our general conversations and in medicine, because we've always heard that stress impacts our health or stress impacts our hormones, our stress impacts our sleep.

But it's been an area that, in my opinion, has been kind of brushed over and we haven't really gotten into the science of it. Same with fertility. If you're stressed, it's going to be hard to get pregnant, but it's hard to believe that without understanding why or how it happens.

And so when you don't really put a lot of stock into something, it's an area that we don't really pay attention to as patients. And I'll admit that as myself, as a practitioner and as just a human being, stress is one of the hardest things to address for people because it's like you can't quit your job, you can't leave your family behind and like go on a perpetual self-care vacation, you know?

How do you manage that in your day to day life in a way that's realistic? So the HPI access is really about looking into the function and communication between the brain, which H stands for hypothalamus and P stands for pituitary gland.

PCOS, androgens, and adrenal stress

These two, the H and the P are like the control centers for all of our hormones in our body your thyroid, your adrenal glands, your reproductive hormones, ovaries, testes, etc.

They're the ones that are always sensing what's around. And then producing hormones that will stimulate the glands to do what they're supposed to do. They're basically like the conductors of the orchestra.

So in this case, when we look at HP axis, we're looking at the control between the brain and the adrenal glands. Now, the adrenal glands make a couple of critical hormones.

They make the adrenalin hormones, although we're not going to talk much about those today. But certainly when it comes to stress, if you have an acute stress, I the time that I always feel it as if I see flashing blue lights behind me in my rearview mirror of the car.

I you know, I'm I'm a safe driver, but I still get that adrenaline rush, like I'm going to get pulled over. But that a quick rush of adrenaline comes from the adrenals.

But then on a day to day basis, we produce cortisol. Now, cortisol is a really important hormone that is a good player in our body. It has so many good functions.

It is released a lot in the morning and that helps us to wake up and then it gradually decreases throughout the course of the day and should be low in the evening.

So it has a pattern, almost like a wave, you know, rise in the morning and then slowly come down through the rest of the day. And it is really important to help our organ systems understand what they should be doing right sleep at the time of rest and rebuilding that low cortisol helps our organs understand that it's quiet rest, rebuilding time and the morning when it surges.

That tells everybody it's time to wake up and start doing their jobs. It's kind of like the alarm clock in the body. And so there's this pattern that we should be able to see now, the adrenal glands also make DHEA, which is a precursor for many other hormones, including testosterone, and one that can be quite elevated in women with PCOS.

So that's a little bit about the HPI access in general. Now, what can happen is that when we're out of balance, it could be due to chronic stressors. And when I think about chronic stressors, it might be stress in your life.

It could be bad stress like death of a loved one, loss of a job or good stress is actually caused the same hormonal

release. So let's say you're planning to get married.

You are so happy and so excited but that big long to do list and that energy and that, you know, passion that you're feeling towards that project can stimulate cortisol.

So it's not always bad things, but it also could be things like blood sugar, it could be injury or inflammation in the body and infection. All of those things will cause cortisol to go up again.

It's like telling your body, We need to be on guard. Something's happening. We need to be doing our work. And when that happens for a long period of time, then that cortisol rhythm can get out of balance, or the brain and the adrenals, their communication can get a little fuzzy.

So you start to see dysregulation. And this used to be called adrenal fatigue. I'm sure a lot of people have heard that we really try not to use that phrase anymore because it's not so much that your adrenals are tired and they're not working anymore.

It's that the instructions that are coming to them are not the right instructions anymore. And so we know that stress can impact the functioning of the adrenal glands and the release of cortisol.

And then you get to points where people produce too much or too little or they produce it at the wrong time of day. And that can create a lot of downstream effects in the organs who are listening to cortisol, like the ovaries, like the adipose tissue, like the thyroid gland.

And so this is where you have stress as really a hallmark, a root cause for so many different concerns, including PCOS. Absolutely. And women in PCOS often do have a flip circadian rhythm and know where they have the the cortisol, which should be high in the morning.

It's actually low in the morning and then it's, you know, flipped. It should be higher at that point and lower at night. And it's high at night and they can't go to sleep and they have night munchies and so on.

So that is, I think, really important. And you know, you mentioned like the interplay between cortisol and estrogen. So you mentioned the Dutch test measures more than one type of estrogen.

And so many people just use the word estrogen like it's one thing. So maybe you could, you know, help our viewers to understand estrogen is like a family of of hormones and what are the different estrogens and what do they mean?

That's a great question. So, yes, we do use this kind of common term estrogen and it really is like the family. So estrogen is not just one compound. When we talk about estrogen as one compound, usually what's meant is asked for diol or E two and E two or estradiol is the most potent form of estrogen.

So it's the one that is the most biologically active of the main hormones. But we also have E one and E3, kind of the brother and sister, the right and left side of us are dial astron is e one.

We actually make the most astronaut in the body and then estriol is e three. Now if you look in kind of conventional medicine, when they talk about estrogen, they're talking about those three estrogen estradiol and estriol.

When we think about it and the Dutch test, I would add all those metabolites in the family too, because many estrogen metabolites behave like estrogen.

Remember, they're just undergone this very small conversion. If you can think about your chemistry class, the oh eight groups that get added on, we're like, remember doing those cube models?

Did you ever do cube models and chemistry class where you'd have to build the compounds? The oh age group is just one little cube added on to this massive structure of estrogen.

So it's a very small modification. And they will still bind to estrogen receptors, which is like the little ears on the cells that are listening for hormone in the body.

They can still hear the metabolites. They're not as loud. They don't produce as much activity in the cell, but they're still active. So we would add the oh eight forms that hydroxy forms of estrogen, estradiol and estriol and then all that.

Also the meth, oxy, the methylated forms of those hormones as well. Those are all in the family. So if you're not metabolizing as well, you can see that your estrogen impact, let's call it that, when we look at the pool of all the hormones, could be going up and up and up.

Even if you're ester diol is within normal range on a blood test because you're not getting rid of it effectively and the overall pool starts to grow.

So yes, on the Dutch test, we love that we can look at those whole families of hormones and of estrogen and progesterone and of androgens, because it really can help practitioners understand the overall impact and fact I see very often on the Dutch, just to talk about this all the time where testosterone is normal, but the downstream metabolites are high.

And so that's another example that you'd miss it. On a blood test, a practitioner would say, Oh, free and total testosterone look totally fine. Your androgens aren't high, but the patient has symptoms of high androgens.

And when we look at metabolites, we can see those metabolites are still high. So it is really important to look at the overall family, not just the single hormone or just one member of the family, because we all have those like brothers and sisters that are well-behaved.

But then we also probably have those ones that are the wild child causing the problems in the family. You got to look at the whole family together and not just one individual.

Yes. And it certainly gives a whole different perspective when that term that gets thrown around so much of estrogen dominance that it doesn't mean that the ovaries are putting out too much estradiol at all.

It's it could really apply to poor metabolism and having an imbalance or an excessive amount of some of these unwanted metabolites. Right. Absolutely.

And for women with PCOS estrogen, we don't talk as much about estrogen. In women with PCOS, we talk more about androgens and progesterone. But because progesterone can be low due to an obvious lesion, having more and more cycles that are an obvious artery will lead you into estrogen dominance, even if estrogen levels are normal, because it's all about the relationship and the balance between estrogen and progesterone.

So it's nice to be able to see that in a kind of a more grand broad picture. Now, in terms of timing, like when would you get a Dutch test? Now, sometimes women have cycles and many times with PCOS they don't.

So is there a particular time of a month with or without a cycle, that a woman would be ideally chosen? You know, that would be the day to choose to actually do the Dutch test.

And definitely so we normally like in a person with a 28 day cycle, we would say test between 19 and 21. So about seven days after ovulation. And our team provides a lot of customized help for patients where their cycles are irregular both and things like how do you know you ovulate?

So we would help people understand how to do basal body temperature or how to use the ovulation predictor kit strips to be able to identify ovulation and then time the collection of their Dutch test.

But there's also a lot of women who call in because they have variable cycles. They might have a 30 day and then a 120 day and then 45. And it's kind of all over the place and it's not practical to be doing, you know, LH strips, for

example, every day, for months and months that would get expensive and really onerous.

Estrogen families and cycle timing

So we also help with that timing of collection in someone with no cycle but generally we're looking to catch the middle of the luteal phase or the second half of the cycle, and that's because we want to really see what's happening when progesterone is peaking and the relationship because there is another rise in estrogens in the second half of the cycle.

So we can see what the relationship is between those two hormones. So that's really the ideal time to test. But even if you're a provider listening, you don't have to know exactly how to do it.

For every single patient, we have a team of 15 doctors on staff and that's what we're here for. We help people with that all the time to make sure that we help you collect or help your patient collect at the time.

That can give you the best information possible. Well, wow, that's quite a service. There are so many helpers that can really guide the patients and the providers to optimize the timing and then the interpretation as well.

Absolutely. So our team does so much our education and clinical teams to help providers understand how to really get the most out of Dutch test results.

So if you sign up to be a Dutch provider, you get access to two really amazing resources right away that were actually launched in the last year. The first one is the mastering functional hormones testing course.

This is about a seven or eight hour course that's totally free. We've been getting really rave reviews. We've had thousands of people go through it already that we walk you through each hormone, what it does, how it's made, how it's metabolized, and really how to understand a Dutch test.

And the other one is an interpretation guide, which, believe it or not, is 180 pages. So it doesn't take that much to just interpret the test, but to make meaning of it, to understand different patterns.

We had this great conversation with our doc team this week about that because, you know, a lot of times providers call us and they're like, Can you just tell us what to give?

The estrogen is high. You know, the progesterone is low. What should I be thinking about? But it's really important to understand that on the Dutch test, we see certain patterns sometimes with things like dysbiosis or chronic inflammation or thyroid dysfunction.

We when you look at enough tests, you start to see different analytes that come together in a way that it paints a different picture. So you don't want to just treat the high estrogen, you want to treat the underlying inflammation, and then the estrogen is going to come down on its own.

So the interpretation guide really helps providers to look at the results that come back for a patient and understand what might be going on and what they can do about it lifestyle supplements, medications, etc.

But also what patterns you might see that might indicate that there is metabolic dysfunction, for example, insulin resistance. Okay, well, that tells a different story because instead of just throwing, I don't know, sulforaphane to lower the estrogen, maybe you need to put more focus on that patient's diet and getting their insulin to become more sensitive again.

So these two resources are amazing. We have live mentorship groups every week and in addition to that, we do have one on one consultation for providers.

We don't do that for patients. We want patients to work with their provider. But for providers you can call in and get a same day callback to go over a test or you can schedule an appointment for a time that's convenient and our

team will help you, you know, answer your questions and make sense of it.

So I will say, I think what caused this company to be successful in the first ten years it's been around was the amazing white glove service. And any doc that's listening, I'm sure you'd probably say the same.

The doc team is brilliant. They spend tons of time with people to help them understand. And a lot of providers and actually even famous authors have told us, you know, like they credit the Dutch consultation team in their books because they helped so much to form the understanding that they have today about women's health in general as well.

In talking about education, maybe you could comment on the ongoing webinars that you have. The your webinars seem to be on very inclusive of so many different related topics of hormones and and how they work in women.

And also, I believe there is a podcast maybe you could share that information. I would love to. There are so many ways to connect with that. So definitely the podcast is available.

That's public. So whether you're a patient or a provider, if you want to learn more about hormones, you can join into our podcast that's on all the major podcast streams.

It's just called the Dutch Podcast. And if you like hearing my voice, you get to enjoy that every week as we interview amazing guests like yourself on our podcast to share with listeners.

Then we do offer webinars for health care providers. Again, you have to be a provider to be able to join in to those, but that's where we get into more nitty gritty science around different topics.

But some really interesting topics. I mean recently things like intermittent fasting and the impact on hormones, menopause and HRT therapy and the kind of up to date scientific information on around that.

We also talk a lot about our research because we publish a lot. We actually just had a really major piece accepted in menopause, as which menopause is a very prestigious conventional journal of the North American Menopause Society, looking at hormone replacement therapy and monitoring through urine with our testing.

So we really put a lot of information out there and our website is additionally a wealth of information. We have a YouTube channel with lots of videos on it, so there's so many more places that you can learn.

And we have a lot of information on PCOS. So whether you're a patient or a provider, check out the podcast on PCOS or check out the online resources that are free.

There's so much out there if you want to dove deeper. And all the different webinars for the providers, because we have many providers out there watching, this they are archived, so they say they missed them.

They only just found out about this. Can they go back and look at ones that were done in the past? You know, I'm not sure we have all of them on the Web.

Some of them are archived, but they do get recorded. We send the recordings to anyone who registers. So even if you can't attend live that day, still register because then you're going to get the link to the recording.

And if there is one that we've done, maybe you heard about it from a colleague, just email us. We're always happy to share that information, even if not up on the web.

We do have it. So I think the important thing is for all the providers to get signed up, right? So they get on the the email list so that they get this.

It's free to become a Dutch provider. You just go to our website at Dutch Chess.com, click on the button that says Become a Provider. And it's very quick to fill out that form.

And then we'll start to share some of those resources that I talked about with you, including the course, the interpretive guide, and of course, the ongoing webinars.

It's totally free to become a provider. Now, I know this has come up because many women who have PCOS are given oral contraceptives. And then the question comes up, is there any place for doing the Dutch test for women who are actually taking oral contraceptives?

Does that provide any actionable information? We don't really recommend doing the Dutch test when you're on oral contraceptives. That's a really great question.

So I'm glad you asked one we can't see. Those hormones are not the same biological metabolites. So they're not what we measure on the test. And the other piece is that when you're on oral contraceptives, your own hormone production gets suppressed.

Provider education and support resources

So it's really not a good use of your money and resources to do a Dutch test when you're on OCP is now if you discontinue them and you're trying to get a cycle going again, that's a great time to do a Dutch test or to do what we call a cycle map, which I'm actually going through one right now.

You collect samples like almost every day through your cycle. If you have a long cycle like you have PCOS, they'll spread them out for you. But then we actually map your hormones over the course of an entire cycle.

And so I'm looking forward to seeing my own results there. I was just going to move into that and say, you know, what about the the series throughout a cycle?

So maybe just do a little bit more of a deep dove into that and which particular women might benefit from doing that particular test. I would love to talk about that.

And it's a really interesting test. So it looks just at estrogen and progesterone and metabolites at many different time points. So there's 24 samples collected over the course of the month of the cycle.

And again, if you have alongside goal or a short cycle or a regular cycle, we do instruct you on how to collect those samples differently. So, you know, it does apply kind of to everyone.

And what's interesting about that is in the end, you get these kind of graphs of estrogen and progesterone and we produce both what we measure, but also the serum equivalent because we know how to convert what we find in your urine to what must be in your blood.

So we'll tell you kind of where it would be in your blood throughout the course of your whole cycle. This is great for anyone who has a regularity of their cycle.

Try to figure out what's going on. Maybe you don't know when or if you're ovulating. We can tell that from the results. But the real sweet spot for this, in my opinion, is for women who tend to have symptoms of any kind that are always in the same time in their cycle.

Right? They're always right when you ovulate or they're premenstrual or you get breast tenderness in the second half of your cycle or whatever, you get more anxiety in the first half of your cycle.

We really can see what's happening with your hormones throughout the entire cycle, and that can really help your provider better understand what they might be able to do to help.

Because sometimes it can be a little bit confusing when it comes to let's look at mood symptoms like anxiety and depression. Estrogen and progesterone can both play a role in that.

So it really helps us determine what's happening for a patient throughout their entire cycle. Now, the one I'm doing is the most comprehensive. It's called the Dutch Cycle Map.

Plus. And so this is the Dutch Plus and the cycle map. So it's measurements every day plus more measurements on one day, which looks at the entire picture of a day.

So I'm getting the entire month, day by day. I'm getting one day kind of hour by hour, and then I'm doing the cortisol also in saliva, which allows you to get the first hour of the day with multiple time points.

We haven't talked about this yet, but this is kind of cool research, too. And really, the first hour when you wake up, it's like a stress test on your body.

And so you can measure that in saliva. It's called the cortisol awakening response or car. And that's another indication of how resilient you are to stress.

So I'm doing the full check in this month and it is a little bit of like the most expensive tests we offer, but it's the most comprehensive. You get so much information.

Well, it sounds like a wealth of information. So I have to talk to you about your results and see what you're as yourself. You will have them when we meet.

Up next. Exactly like this. Nothing. We providers, we always love to find out about ourselves. Right. So it is. And then of course, then we help others by, you know, using what we learn because we apply it once we really understand. So.

So if there are a lot of women out there who are providers, what can they work with you to order their own tests for themselves? Is that acceptable? Could that happen?

Absolutely. And we get a lot of providers, like new providers who want to run it on themselves or on a loved one. That's totally fine. When you first sign up as a provider, you can get a discount on your first five kits and that allows you to do that at a lower cost.

Basically, we give you our cost for running the testing and then we're happy to talk you through that as well, even if it's your own test. Yeah. And for the men out there, they can use it on either a patient or relative, a spouse.

I just think that's such a great learning tool. You know, when you use it on yourself or someone that you know closely and and then really work with, like you're the experts at the Dutch, you know, talking about how to interpret it and so on.

So I personally love to do that with my, my own self and ordering tests. And in, in terms of how a woman with PCOS can really like access this, like, say, like she goes to her doctor because there are many doctors, maybe they never heard of this test and she says, I want this test.

And the doctor says, I don't know what you're talking about. What what can you do? Hmm. Well, one, don't be surprised, because in conventional world, urine testing is, not something that's done every single day.

And a lot of providers can be hesitant until they actually see that we have peer reviewed research and validation studies. So we actually get a lot of new customers who call us because they heard about it from a patient. Believe it or not, it's one of our biggest avenues.

So definitely talk to your doctor about it if you'd like them to order it or give them our website so they can look at the studies that we've published to validate the data.

But if you your your doctor does say that we do not sell directly to patients, you have to work with a provider. And that's because the test interpretation can be kind of complicated to do.

And we want to make sure you get the most out of it. And also, we just support the health care provider industry. There's a lot of companies that go direct to consumer, but we just think there's such a wealth of knowledge in the functional medicine and naturopathic world that you are going to get so much more out of testing if you get support also from a provider who knows what they're doing.

So on our website, we do have a find a provider tool where you can put in your zip code and get access to all the providers who've gone through trainings with us and really run a lot of Dutch tests.

So that's a great way to find someone local. There's also a lot of providers.

Accessing Dutch testing and closing remarks

If there's no one directly local who work remotely that could help you with test interpretation. And they just consult with people over a zoom like you and I are on today.

So there's a lot of options out there. But definitely, you know, there's so much information to get out of the report that if you are a woman who has PCOS and you've never done a test like that that looks at adrenal function and hormone metabolites and androgen metabolites, it might open up new doors for you to better understand what's going on for you specifically.

And you're learning so much in the summit about all of that kind of the role of all of these different systems in your health. This Dutch test, in my opinion, is the best thing out there to help you kind of put those pieces together for yourself.

Right? I think what I'm hearing as a takeaway is even if your personal doctor has never heard of the test and doesn't know what to do, first of all, the doctor has so many resources that he or she can really master this with the help of your team.

And if your doctor is somehow like too stubborn and won't order it, they still can work to find someone through your your provider list. So don't give up, right?

Absolutely. Don't give up. And in terms of the the patients and the providers there, so for providers who say, okay, I definitely want to get on board.

So for the provider group out there, what would their next step be? Well, it's really easy. You would just go to dutchtest.com and then click on Become a provider.

We collect just some really basic information and then we'll go online and validate your license and then from there you're free to order. You'll our team is really supportive.

We have like a white glove VIP onboarding team that will reach out, help you understand how to get started and navigate our portal. Order your first test, get signed up to meet with a doctor so you can get that customized training.

And we'll point you in the direction of some of those courses and self-serve trainings that will really help you get started with Dutch testing. But I will say that the mastering functional hormones testing course, we actually made it agnostic.

We don't even talk about Dutch testing until the bonus modules. When we walk through each report and tell you how to interpret it, the entire test is really just about root cause medicine and how how to look at hormone health differently.

So even if you aren't running Dutch tests, you'd still get so much out of taking that class. Well, it's really great. So everyone out there who's a provider should definitely learn, right?

That's why we're all here to learn. And for the the patients with PCOS who are watching this and they say, okay, well, I'm going to talk to my own doctor or provider about getting the test, but I also want to learn more myself.

So do they also just go to your website or what would be their next step just for getting more education? So the website, if you want to do like a Netflix binge of this information, you can go to the website and click on the education tab and we have so many videos in there.

The YouTube channel is also great, but really the best way to kind of stay in touch with us, get the latest learnings would really be the podcast. The podcast is geared for highly educated patients who want to learn more and providers who are new to functional medicine.

So we have the most amazing guests on there and we do get into a lot of nitty gritty science and a lot of detail on podcast, but that's a really easy way that you can kind of have it notify you on your phone when something new is available.

And if it's interesting to you, you can go ahead and jump in and have a listen. Those are like 30 minutes. I always listen to my podcast when I'm out walking my dogs.

It's like one of the best times of my day. So if you wanted to learn more, that would be you. Probably your best place to start. Well, that's fantastic.

And I know you and I both love data. I mean, you can't really tackle a problem if you don't have the fundamental information about the problem. So this is great.

It gives so much more information than the the average just blood test running will show. So I can't thank you enough for joining me and sharing this wealth of information out there.

So women with PCOS and providers of women and caring for women with PCOS can really have greater expanded tools in which to understand what's going on in the bodies of themselves or their patients.

So thank so much, greatly appreciate you joining me here and I look forward to seeing you soon. Thank you so much, Dr. Gersh