Introduction to Hormone Testing

Okay, so let's talk about hormone lab tests and what they can do to help you solve your perimenopause or menopausal puzzle and how they could be vital to you understanding what's going on in your hormones as you transition through peri-menopas and menopus.

So I am a licensed naturopathic doctor in both Massachusetts and California. And one of the things that having a license allows me to do is diagnose patients.

And that is a crucial allowance to have to be able to order lab tests. So if you're currently working with a nutritionist or health coach, that's great, but they may not be to able order test for you in most states because they're not allowed to diagnose you.

That's one the distinctions between naturopathic doctors, licensed physicians, and health coaches. And even though I am a licensed physician, I'm not your physician necessarily, so take this presentation with a grain of salt and know that it's meant for your education only and not meant to diagnose or treat you.

So now let's get into that hormone lab testing. what these lab tests are, why you may want to look into them, when to have them done, and the different types of testing that are available to you.

Who Can Order Labs and Why It Matters

And I know many women go into their primary care office visit or see their gynecologist and asking if they can test their hormones because there's a lot of talk online now about perimenopause and menopausal hormone balance, estrogen dominance, and the other intricacies of it.

And as you're talking to your gynecologist or primary care doctor, their brain might be exploding because they really want to help you. They want you to feel better, but they know that a lot of the hormone tests that they're allowed to do under insurance coverages aren't necessarily the right hormone test to helps you identify what's going on.

In some cases, they are not really applicable to you So unfortunately, a lot of women that go into their doctor and perimenopause are told that it's either too early to do hormone testing because they're not in menopausal yet, and it is not worth it because there's still cycling and the hormones are changing so frequently, or that really wouldn't mean anything because their hormones or changing things.

frequently and a blood test is just a snapshot in one period of time, which is correct. However, in menopause, women are also told that your hormones are already low, so why bother testing?

It may not be worth it and it wouldn't mean anything. That's not totally the whole story. Let's dissect some of the facts and myths around hormone testing.

Thinking about hormones, hormones are made from cholesterol. Basically, they're made out of fat, so they are fat soluble, but your blood is water soluable.

It's kind of like mixing oil and vinegar.

Why Standard Blood Tests Can Be Misleading

So when your hormones or traveling around your body and your to get to one organ to the other, They need to be bound to protein to make them soluible in the blood.

However, most of that bound hormone, which is 80% to 98% of the hormone is inactive because it's bound to protein. So when you get a blood test for a hormone such as estrogen or thyroid hormone most to that number is not active hormone.

It gives you a number but doesn't actually tell you what's going on in your body which why your doctor may be hesitant in running these blood tests for you.

Also, the reference ranges for these blood tests are very wide to account for the changes of these hormones a woman has throughout the day and throughout month.

So most of the ranges are made for fertility assessment initially. That's when women will have their estrogen and progesterone, maybe testosterone and other hormones tested around day three of their cycle to determine fertility purposes.

However, estrogen and progesterone are at their lowest at this time of the cycle. So if you're in perimenopause or thinking about menopaus or possibly PCOS or other hormone conditions, having your blood tests around day three don't really tell you much about what's going on.

Also, most hormones are higher in the morning. If you are having a blood draw at noon or after work, it may not really be applicable to what is going in your life and show you the actual numbers of your hormones.

And hormone release varies a lot, even if it's in the morning where progesterone is highest, within that hour that it is the highest it can still range 80%.

So whether you have your blood drawn at 9am or 9.45am, it could still differ by 80% so your doctor knows that these tests aren't totally accurate in that way to predict what the hormone levels are in your body and that's the reason for not wanting to do the testing with you.

not that they don't want to help you. There are some blood tests that are useful. Thyroid labs are very predictive and accurate in blood. Insulin growth hormone, FSH and LH, which are ovulation hormones.

It can be used to determine possibly menopause if the F SH level or ovulations with L H and looking at PCOS. So those are somethings that you can use blood test for.

So if you're going to have a blood test, I recommend going in the morning and while you are fasting. Eating can affect some of the hormone release. So you want to be fasting and like I said, most hormones are higher in morning.

If you have menstrual cycles, go to the lab around day 21 of your cycle or seven days before you expect your next period. This will be a good timeframe to get good estrogen and progesterone readings.

And if your going have estrogen tested, ask for estradiol, which is the more strongest form of estrogen that has more to do with your cycle, or ask if they're going to test estrogen to the three types of estrogens separately.

When Blood Testing Is Useful

So it's estrone, estridiol and estriol instead of doing a bulk estrogen, a number that includes all of your estrogen, the strong ones and the weak ones, and isn't very helpful.

What I do more often in my practice is saliva hormone testing for a few reasons. Saliva does not contain a high number of hormone. So it does have a smaller reference range.

We have our smaller range, so we can tell if that hormone is high or low a little bit easier than in blood. And the levels of saliva hormones more reflect the level of tissues.

This tells you more what the active hormone doing and how much of that is acting on your cells. The ranges also differ by age and sex. particular and predictive, and we're looking at your numbers and see if they're the right range for you.

We also can test saliva, collect it multiple times a day or night. This is really helpful when we are looking a cortisol, which changes from morning to noon and then to night especially.

we can also test DHEA, astrogens, progesterone and testosterone in saliva. It doesn't have to be done in the morning, but we most often test these in morning when they're highest.

But it's a little bit more stable at that tissue level and not changing as much throughout the day or throughout month. So if we're looking at hormone fluctuations throughout cycle or with using hormone therapy, saliva is a good spot check to check in on those things.

How to Prepare for Hormone Blood Work

prefer my patients to do the saliva testing for estrogen and progesterone around day 21 of their cycle, just so we can track what those hormones should be at their highest and what they're at during that week.

So in my practice, I use saliva-testing, especially if a patient has a phobia of needles or really doesn't want to have a blood draw. If there's some hormones that we couldn't get in saliva, we'll do it instead.

Definitely for cortisol to manage acute and chronic stress responses, or if a patient's having trouble sleeping, we might test cortisol when they wake up in the middle of the night or really early in morning, and saliva is an easy way to do that.

If we're checking in on bioidentical hormone therapy, because the saliva tells us more of that tissue levels of hormones, we can know more of the hormone therapy if that's getting us to the right levels.

Benefits of Saliva Hormone Testing

And it doesn't vary as much your blood or urine levels of hormones, which might be varying depending on when a woman's taking a progesterone pill or using a cream or are using an estrogen patch that is going to greatly change the urine and blood levels estrogen, depending if you're on day one of patch or day four.

So checking in on saliva is a more accurate way of seeing how that hormone therapy is actually changing your tissues. And again, if we're questioning perimenopause or PCOS or whether or not a woman's ovulating, we can track some of those ovulation hormones, LH or FSH and progesterone a few times throughout a cycle or a month to get a good map on that.

Saliva tests also can be more budget-friendly than more complicated urine tests. So if you're looking for hormone testing and the urine is outside of your budget, So I already mentioned urine hormone testing, so that's another thing I use pretty often in my practice because this can tell us hormone levels of estrogen, testosterone, DHEA.

It can tells us about hormone metabolism as well, which is very important when we're thinking about estrogen. So it can give us a daily average of your hormones.

Again, there's different ranges for age, pre-menopause and post- menopausal and male versus female. It's easy to collect the urine multiple times a day or at night.

And on many days of a cycle, if we want to track hormones for a woman that may be cycling, it's easier to do that with urine. Urine is pretty good for testing cortisol and cortisone to get an idea of where that is.

I prefer saliva for cortisol, but we'll run a urine test first and see if need to the saliva. DHEA, all different forms of estrogen, the three that I mentioned, plus their metabolites.

hormone, urine testing, we see how your body's processing your estrogen, how the liver is detoxing it, and to get an idea if we need to focus on estrogen balancing through detox with the urine test.

Like I mentioned, you can also test LH, which is luteinizing hormone. Throw out a cycle to see if a woman's ovulating or not, even if she's not having periods that you identify.

Urine, I will admit, is not ideal for progesterone because we do have proesteroid metabolites eliminated in urine that we can test, but the hormone itself, pro testosterone is, not eliminated urine.

So we have to test the metabolite. And then to get an idea of where the projesterone levels are at. Again, this is a time where I might follow up with a saliva test.

If we questions about the, in the urine, testosterone, it is eliminated and urine so we, do test for it.

When Urine Hormone Testing Is Helpful

However, slightly over 40% of people have a genetic mutation that causes them not to eliminate testosterone through the kidneys and in urine. So you may have low testosterone reading on a urine test that really has to do with your genetics and not actually that you have load testosterone.

Again, this is another time that we may check in on saliva to confirm some of the findings on the urine tests. But I do prefer doing urine testing again if someone has a phobia of needles or if we're looking at hormones that aren't tested in blood very well.

And then with saliva, if somebody has really sensitive gag reflex or issues with dry mouth because of medication or medical condition, they're not able to produce enough saliva to get enough samples, we'll do the urine test.

Some of these medications can be Antihistamines is the one I see most commonly that causes dry mouth and dry eye, but there are other side effects to many prescription medications that can cause dry mouths and issues with saliva.

For new patients, I like to run the urine test mostly because we're collecting just those urine samples and we are getting both cortisol and estrogen and progesterone and the metabolites just to see where things are going.

So I know a little bit about the patient's liver health and gut health as well as their hormones when we were starting to work together. Also, if a patient is concerned about bone density or osteoporosis prevention, we like do urine testing because there have been some recent studies showing certain urine levels of estradiol, whether a woman has naturally making it or for using bioidentical hormone replacement therapy, there is an estridiol range in urine that we want to make sure that she's in to preserve and increase bone density.

So for a lot of my patients in early menopause concerned about bone intensity, we're doing urine tests in, if we are using, bio identical hormone therapy to makes sure we using enough estrogen for the bones, wether or not it's helping hot flashes or sleep or other issues.

And then like I mentioned, I prefer to do urine testing when we want to track hormones throughout a cycle or a few weeks to get an idea of what's going on, because it's a little easier to that in urine.

So you may also be asking yourself, well, what about these at home test kits or test kids that I see marketed to me on Facebook or Instagram or through a website?

So in some cases, those are the same companies or same test kits that I order from my patients. And in sometimes cases it's not. So when you're looking at a hormone test that's being marketed to you that you can do yourself and get your results, there are a few things to think about.

Evaluating At-Home Hormone Test Kits

First is if it is a saliva test, you want to make sure you are sending in a tube of saliva or at least four tubes of salivary throughout the day and not a saliva swab.

If you swabbing with a Q-tip and then sending in that, that is definitely not enough saliva to do the hormone tests. So you want to make sure that you do need to spit in the tube and give them a lot of saliva.

If it's a urine test, you should be expected to send in dry strips of urine. Basically you're collecting your urine in a cup, dipping the strip in cup waiting for that to dry, which means it stable and doesn't need be refrigerated and you can ship it pretty easily and it won't be disturbed.

preserved in the urine strip. If you're sending in any tubes of urine, that's not going to be stable enough for the lab testing to accurate, so you don't want to do that type of kit.

There are some finger stick samples that can be used for blood tests. Vitamin D and thyroid hormones can done this way, if that is something that offered to you to avoid doing a blood draw, those can pretty accurate.

Other things to think about or be aware of with these test kits that are directed to consumers and patients themselves is that often they're more expensive than the lab tests that your doctor is going to provide.

Even if it's saliva or urine, usually if its marketed directly to the customer, it is a higher price than I would get the test for. So going through a licensed provider sometimes is the savings there.

You also want to look and see if the lab is certified. It should have a CLIA certification, meaning that the Lab is monitored and inspected. And also think about the interpretation of the labs.

If you're doing these lab tests on your own, often there's not any interpretation or diagnosis along with it. You get the numbers, but you may not have the guidance to know what they mean.

So you want to have a plan for after doing the test of having some interpretation done or seeing a physician. And then think about the goal of who's selling you the Test Kit.

Is there a goal to sell you their line of supplements or to see if you need a certain prescription? So that's where finding a lot of supplement companies or prescription apps like for hormone replacement therapy are offering the Tests Kits or selling the tests kits as a means to prescribe what they're selling.

So those are just things to be aware of. And I hope that helps you know a little bit more about hormone testing that's available to you and why you may consider it in your health.