



Transcript: #347 Is Hormone Replacement Therapy Safe - How to Properly Replace Hormones, and The Role of Toxins with Dr. Lester Lee

- Wendy Myers:** Hello. My name is Wendy Myers. Welcome to the *Myers Detox Podcast*, where we talk about everything related to heavy metal detoxification and living a healthy lifestyle.
- Wendy Myers:** Today we have Dr. Lester Lee on the show, talking about hormones. We're going to be talking about hormone replacement therapy. Is it safe? How to replace hormones properly, all the different options and the role of toxins in lowering hormones.
- Wendy Myers:** It's such a good show today because I think there's a lot of misconceptions out there about the safety of hormone replacement therapy and how long you should be on it. I think a lot of women that could be on hormone replacement therapy, to help a lot of their different health issues, don't go on it because of their fears of cancers or fears of misinformation that they have about it. Maybe they're trying to do things naturally and don't want to take medications. They throw hormone replacement therapy into that bucket of medications to avoid, when they could be living a better quality of life.
- Wendy Myers:** I used to feel this way as well. The more and more I learned about the latest research on hormone replacement therapy, if it's done correctly, it can be an amazing contributor to help warding off diabetes; getting people off diabetes medication, warding off osteoporosis and bone loss, helping people with better insulin sensitivity, helping women ward off heart disease and just promoting a lot of different health benefits. The pros far outweigh any cons related to HRT. That's what today's show is about.
- Wendy Myers:** We're going to be going over a lot of different topics related to HRT like can hormone replacement therapy cause weight loss and how. This is really interesting, how all the different factors related to low estrogen, progesterone

and testosterone contribute to weight gain. It's a really interesting conversation. We started out with that topic. There's new research and analysis of some older research, specifically the *Women's Health Initiative*, that shows that bioidentical hormone replacement therapy does not contribute to cancers. We'll discuss that in detail as well as how toxins are interfering with your hormones. There's a lot of endocrine-disrupting chemicals in our environment. It's one of the reasons so many people are having hormonal issues and resulting side effects from that.

Wendy Myers: We'll talk about the different HRT options, the pros and cons of pellets, patches and oral supplementation. There are also nasal sprays. We'll explore all the different options and symptoms of low hormones. We'll also talk about estrogen dominance syndrome. How you can be estrogen dominant when you have low estrogens on your hormone testing, the role that synthetic xenoestrogens play and that delicate balance, as well.

Wendy Myers: We'll also talk about how HRT can help to ward off high blood pressure, diabetes, depression, heart disease, osteoporosis and more, as I mentioned before. The fact that hormones are not just about feeling good or having a good weight or whatnot. These hormones have a very protective effect on our health and we can retain our youthfulness and health longer, when we have proper hormone levels in our bodies. Great discussion today on hormones with Dr. Lester Lee.

Wendy Myers: I know so many of you guys listening are concerned about the heavy metal levels that you have in your body. I created a quiz at heavymetalsquiz.com. Take the two-minute quiz. You get results as to whether you have high, medium or low levels of toxins in your body. Based on your results, you'll see what your next steps should be. Where do you get started with detoxification? What kind of do's and don'ts you should be thinking about when it comes to detoxing heavy metals and chemicals. You get this totally free video series after you take the quiz. Go check it out at heavymetalsquiz.com.

Wendy Myers: Our guest today, Dr. Lester Lee is a University of California trained internal and sports medicine specialist. He was a fellow trained in functional and metabolomic medicine through the American Academy of Anti-Aging Medicine, also known as A4M. He is a past, two time U.S. Olympic team physician and has had a clinical practice, Lee Regenerative Medical Institute, for over 34 years. In fact it was voted *LA Times*, Best Medical Group Practice In Orange County, in 2019. Dr. Lee fronted hormone replacement therapy for men and women in Orange County. He's been doing it since the 1980s. He's been doing bioidentical hormones since the '80s and really is a true pioneer in hormone replacement therapy. You can learn more about Dr. Lee and his work at leemedicalinstitute.com. Dr. Lee, thank you so much for coming on the show.

Lester Lee: Thank you.

Wendy Myers: To start off, I wanted to talk about what I find most interesting about going into menopause because I just started going into menopause this year, I'm 47.

A lot of women listening are in perimenopause or in menopause. I wanted to talk about the fact that when women reach menopause or are going into menopause, or perimenopause, they tend to gain about 10 to 15 pounds. A lot of women find this very irritating and blame themselves, but it's really due to the fact that fat actively produces estrogen. When our adrenals are not working so great, when our ovaries start to shut down and produce less estrogen, we gain weight. This is simply because the fat produces estrogen. Can you talk a little more about that?

Lester Lee: That's a great observation, Wendy, because on a daily basis those are the patients that we see in our practice, in my practice. The young ones are actually going through menopause. Did you experience any weight gain when you started those perimenopausal months?

Wendy Myers: I did. This year I'm not in menopause, but it's just the beginning. I have gained 10 pounds this year, which I'm not happy about.

Lester Lee: What have you done for that? Do you know the reason, by the way?

Wendy Myers: Well, I work a lot. I love what I do but I'm probably not taking care of myself enough. I am just working on educating my audience about health and not taking care of myself enough. It also has to do with reduced estrogen production and my body trying to make up for that deficiency, I believe, as well.

Lester Lee: Part of that is not just the estrogen. During those times of perimenopause and menopause, the weight gain may be coming on because of lower DHEA from our adrenal glands or increased cortisol from our adrenal glands secondary to accumulations of years of stress and duress both psycho emotional and physical. Estrogen, as you mentioned, is a vicious cycle. As we develop and gain more belly fat, we're aromatizing and producing more estrogen. The difficulty with that is it is not really a healthy estrogen. That's the best way to describe it. We've also accumulated toxins over the decades and you being the detoxification expert by reputation, which is very good. We're getting unhealthy estrogens in place of healthy estrogens.

Lester Lee: This indirectly bashes the good stuff, levels from our more youthful years are decreasing, but our bad estrogens are also increasing. The distribution of the fat for women is usually not as much around the belly, but I would say the thighs and the buttock areas. Also, testosterone decreases, so we find that we're losing lean mass and replacing it with soft tissue. The appearance of the figure is less lean and proportionately more soft. The other consideration is our metabolism slows as we mature.

Lester Lee: Without being too technical about our telomeres, our ability genetically to metabolize sugars to metabolize fats. As for thyroid, as we decrease in progesterone and estrogen our thyroid decreases because we need adequate estrogen, and adequate cortisol to make active thyroid. Thyroid comes in a couple forms, T4 is the reserved form, converse to T3 which is the active form.

We also find, at least in my practice and I think it's in the literature also, that as women mature their hormones go south, estrogen, progesterone and testosterone. Their thyroid, not necessarily goes down, but it's less effective and less efficient for metabolism and therefore the distribution of fat as well as energy.

Wendy Myers: That was a really good explanation because you just hit on all the different points and why women gain weight. I like to talk about that because I think that a lot of women deal with this. As they get older, they're frustrated by it and they blame themselves. I just want to make it clear that it's not due to lack of self control. There's just a physiological natural process that takes place. We need to understand that. In turn, can taking hormone replacement therapy, which we're talking about today, promote weight loss?

Lester Lee: I guess it can, because the idea is to optimize the hormones into a balanced symphony. Again, we're talking about estrogen, progesterone, testosterone, thyroid, cortisol, DHEA and pregnenolone. We're trying to optimize metabolism and help the patient, athlete even, become more insulin sensitive. That's the other thing is that as our hormones become deficient as we mature, we become more insulin resistant. Indirectly, in layman's terms, that means it's more difficult to metabolize fats and sugars and therefore more difficult to lose weight, thus increasing body weight. It's a vicious cycle; increased body fat, more aromatization of estrogen, more water retention and more difficulty metabolizing fat.

Lester Lee: It's very frustrating for women. We are told daily in the office, "I eat clean, I almost eat like a bird, but I'm still gaining weight". We also look at the quality of sleep because sleep as you know, Wendy, is very important for the hormones; the hormone cycles, the circadian rhythm, the efficiency of the hormones and the production of hormones.

Lester Lee: Back to your question, when we do our testing whether it be by urine, saliva or serum, we're looking at the spectrum of the hormones. Perhaps the previous guests that you've had on your show discussed the same thing. Similarly, we're looking at the spectrum of hormones and not just male/female hormones. Some people don't realize that thyroid, cortisol, DHEA, pregnenolone, leptin and ghrelin are hormones, too. They are just different kinds of structures of hormones. We look at the spectrum of those based on the symptom presentation of the patient.

Lester Lee: For women, as they mature they lose lean mass. Not necessarily sarcopenic, but I have seen a lot of young ladies like yourself, in their 40s, and they say, "I was an athlete. I was a gymnast. I was a runner. I was a lean, mean killing machine and ever since I came into my 40s, I've lost all that." Remarkably, when I add a little bit of testosterone cream or pellets, these individuals regain the motivation and the libido. They retard the sarcopenia, the lean mass loss.

- Lester Lee:** The other part is encouraging them to do resistance exercises. Most women don't really do resistance exercises. They mainly do some cardiovascular. That's important too, but if you want to increase lean muscle mass, you have to incorporate resistance exercises. Usually, I tell women that it's not just your TheraBands. It's not just doing push-ups. I like them to actually work with weights and not a lot of weight. But weights, ergonomically, metabolize calories much more effectively than let's say biking or walking.
- Wendy Myers:** I agree 100%. The best shape I've ever been in my life is when I was lifting weights to fatigue, three or four times a week. Not really that much cardio, just some walking. I was 18% body fat and felt really, really strong. You just don't get that with Pilates, with just walking or rebounding and things like that.
- Lester Lee:** I think your workouts are like the HIT principle you're probably familiar with, high-intensity interval training, incorporating resistance exercises along with a little bit of cardio. Again, you're going to burn a lot more calories and put on lean mass when you're doing that kind of periodization workout.
- Wendy Myers:** **Let's talk about some of the symptoms of hormone deficiency, where hormone replacement therapy or HRT, would bring relief or be appropriate to use. There are a lot of women that know they're starting to miss their periods. They're like, " Oh, here it comes. I'm going into perimenopause." Besides that, what are some other symptoms that may trigger someone to think that maybe it's time to start considering HRT?**
- Lester Lee:** Well, when you start approaching irregular cycles, maybe you noticed the weight was a little more difficult to decrease, maybe the libido was going a little more south, maybe the motivation and the lean muscle mass decreased. You notice, not necessarily hot flashes but maybe drier skin or vaginal dryness. It's any of those symptoms that you have experienced in the past let's say three years, some of the presentations are; my energy is low, my focus and my cognition is decreased, my skin is drier, my hair is thinning, I'm getting more belly fat, I'm softer, I have low libido, I have lower self esteem, my quality of sleep is lower, my significant other or my spouse is not interested anymore which is okay because I have no libido anyway, so it's okay with me.
- Lester Lee:** Some women in their 30s, by the way, experience that not necessarily 40s or 50s. We see a fair number of female patients in their early 30s or mid-30s with all those symptoms. Part of it has to do with exposure to xenoestrogens, exposure to heavy metals, toxicities and environmental pollutants causing disruptions of the hormones. Some of it has to do with a genetic component, whatever the genetic component is. Those are probably the most common presentations. Some of these individuals say, "I was great, I didn't have any symptoms till I turned 51".
- Lester Lee:** The patient may not be in menopause, and she may still have regular cycles, but she has all these symptoms, interestingly. It's not always hormones and I express

that to the patient. We look at other multifactorial areas. Multifactorial areas have comorbidities that are affecting the way you feel. Transmitters in the brain, maybe they're going south, too. That's how Valium and Xanax work on GABA inhibitory transmitters, for anxiety and calming. Maybe it's your serotonin, maybe it's your excitatory transmitters; epinephrine, norepinephrine and dopamine. Again, that's how other mood elevators work.

Lester Lee: We look at those transmitters too, via urine. We look at cortisol to see if it's dominant or spiking and causing problems with sleep, insomnia. Disrupted, fragmented sleep is a huge one. Those are the symptoms that we're addressing on a daily basis for both men and women, more women than men though. Men have similar symptoms. The most common one would be, "I'm getting fat. I have low musculature. I have low libido and I have disrupted, fragmented sleep". This may be from apnea, which may be from getting all that fat, which does affect your sleep and nasal pathways.

Lester Lee: For men, hormones are part of it. Thyroid is part of it. Cortisol is part of it. We're focusing a little more on their testosterone because hypogonadism, for men, seems to be their major issue. If men or women take opiates, it lowers their testosterone. Lack of sleep, lowers testosterone production. Lack of resistance exercises lowers both growth hormones and testosterone. Lack of sleep, that's a key one. When you don't sleep well, your body just doesn't function as effectively. We address sleep health and sleep hygiene.

Lester Lee: Dr. Singler is a natural practitioner in my office, she's an expert on that. She has great remedies. Not necessarily using CNS depressants, but things that give GABA support, besides melatonin, besides HTP, besides magnesium; most people don't realize magnesium stimulates GABA too. In epsom salt, the active ingredient is mag sulfate. You bathe in the magnesium sulfate or the Epsom salt and it is absorbed through the skin. You relax, the muscles relax and you sleep better. We just add different forms of magnesium. You're familiar with the different forms: glycinate, threonate, chelated. Back to the question of weight gain, that's always a major one for men and women coming into the office and hormones are part of it.

Wendy Myers: I love that you mentioned opiates, because there are a lot of people taking opiates. That probably shouldn't be. Also other medications like antidepressants and statins, cholesterol lowering medications, dramatically interfere with hormones and libido. They can cause symptoms you suggested above as well.

Lester Lee: Yes.

Wendy Myers: Yes.

Lester Lee: I agree.

Wendy Myers: Who should not go on HRT? We're going to talk a little bit more throughout the show about why you should go on HRT and the pros of that, as well. There are a lot of benefits but is there anyone who shouldn't be considering HRT?

Lester Lee: Well, obviously individuals who have cancer, we don't have them on hormones. Not to say that they're not candidates once they're in remission. For a woman with breast cancer or ovarian cancer, I like to see them in remission, let's say for breast cancer for at least three years. We work in conjunction with their oncologist, their gynecologist or gynecologic oncologist to get the green light. Are you okay to restart? I also like to check in our office, estrogen metabolism and estrogen metabolites. I look at the proportion of good estrogens to bad estrogens and genetic testing to see how they metabolize estrogen. Are they prone to abnormal pathways of estrogen, are they just prone genetically to getting cancers and the kinds of cancers?

Lester Lee: For women we normally think about breast, ovarian, cervical, uterine, not as much pulmonary and colon, but yes, those are considerations too. Individuals who have tumors of any sort, I'm a little more cautious with. If we don't have a diagnosis and etiology of that tumor, I prefer them not to be on hormone replacement therapy. The topic comes up, sometimes weekly, for both males and females. "I've been diagnosed with substance abuse disorder", whatever the substance is. "I have an addictive personality. The psychiatrist feels I should not be a candidate for hormones".

Lester Lee: I can understand this perhaps for men who inject testosterone rather than use the transdermal topical kind. Even if you tell them to use a little bit, they're going to quadruple or quintuple it, especially for bodybuilders. If you tell them the right dosage for you is ½ cc a week or 100 milligrams, they'll say "I had good results with that but I went ahead and gave myself 5 ccs". It's perhaps that obsessive compulsive disorder or addictive personality. I work with our psychiatrists to give them a proper portion. We don't want to deprive them of hormones, man or woman. Wendy, have you come across patients who mentioned that their doctor said "You're not a candidate for hormones"? Have you come across that?

Wendy Myers: I haven't. I've talked to a lot of women who are concerned about HRT and if it can cause cancer. They ask about the synthetic versus bioidentical, we'll get to that in a second, but these are the more common questions I come across.

Lester Lee: Let's kind of segue into that. I don't personally feel that bioidentical hormones from natural plant-based botanicals cause de novo cancer. Certainly, we're looking for any evidence of genetic predisposition to cancer, regular female exams like mammograms and follow up with their gynecologist, yearly. If you're going to develop some kind of a tumor, we need to know about that and we need to take you off your hormones for the time being. As far as the synthetics, I feel synthetic hormones were the culprit. Was it conjugated synthetic estrogen and/or synthetic progesterone?

Lester Lee: Well, the progesterone part was a progestin, which is a synthetic and known to cause cancer, cause proliferation of abnormal cells whether it be uterus or breast, versus the healthier form of plant-based progesterone. I'm going to probably digress a bit, because it'll stimulate further elaboration on my part to some of your previous questions. Go ahead.

Wendy Myers: I had read many, many years ago that the Women's Health Initiative study originally showed that there are increased cancers in women on HRT. But there's been a recent reanalysis of the data that now shows that breast cancer is significantly reduced in women getting the estrogen only, versus the estrogen plus synthetic progesterone. The study, therefore, proves what you just said that it was this synthetic progestin that turned on the cancer cells. Because of that misinformation going around for many years, there are a lot of women that are shying away from HRT, that could be getting relief of their symptoms, when it's right for them. The study was misinterpreted many years ago.

Lester Lee: I agree. I do recall that 2004 Women's Health Initiative study, of hundreds of thousands of women. We have to also remember that the lay population doesn't really know how studies are run. When it comes into the news, then it goes viral. I believe some of these women averaged age 60 or 61, who had a lot of comorbidities. I think a lot of them also smoked, too. Are these individuals set up to have and develop carcinomas? Not being a researcher with that data, I can't really answer that part, other than the fact that if I look through the literature over the past 10 or 15 years, not necessary the WHI study; but I do not see that natural plant-based bioidentical hormones induce, cause or create cancer, or heart attacks for that matter.

Wendy Myers: Yes, I was talking with my friend, Dr. Lindsay Dvorak. She's saying that there was some recent research by Dr. Avrum Bluming. He has the longest open-ended study, giving estrogen in the form of Premarin to hundreds of breast cancer patients with no increased risk of recurrence of breast cancer. These are women that are prone to that or have developed that, and they aren't getting recurrence of it after taking HRT.

Lester Lee: I apologize, I'm not familiar with the study. I'm familiar with Dr. Bluming's name. He's a well respected gynecologist, correct?

Wendy Myers: Yes, he is.

Lester Lee: I believe he is placing these patients on conjugated estrogen or Premarin, by brand name, not the synthetic estrogen, with no incidents of recurrence of cancer. Back to the culprit, it's the synthetic progestins, Provera by brand name, medroxyprogesterone acetate. I remember that from pharmacy school way back when. Anyway, back to the culprit, is it estrogen or is it a combination of estrogen and progesterone? It's actually the conjugated estrogen synthetic, which is the old Premarin, correct?

Wendy Myers: Yes.

Lester Lee: He's leaving the synthetic progestin, Provera, out. I agree with him. Again, I'm not a researcher so I can't delve into that other than the past literature review of hundreds of articles. Those of us with a science background tend to shy away from the synthetics because we don't know, ever since WHI. The vast majority of my patients, female patients I'll stress, are going to take bioidentical plant-based, because the literature bears them out as being safe or safer.

Wendy Myers: **How do you administer those? You said that women can take them orally or there's pellets that they can take. Can you talk about some of the different delivery methods of hormone replacement therapy?**

Lester Lee: In regards to routes of delivery, I would say probably my favorite is transdermal, because of the way it's metabolized. It's safer. It doesn't go directly through the liver, therefore, it doesn't create inflammatory markers and enzymes. I'll just mention the different routes and then the pros and cons of different routes.

Wendy Myers: Yes.

Lester Lee: The second route could be oral, oral being a trokie lozenge for submucosal trans-absorption. It could be vaginal suppositories or creams. It can be by injection, whether it be testosterone, or testosterone and estrogen, which is probably not a preference, it is lower down the road. Pellets, the pellets are usually testosterone or estrogen, one or the both. I'm not opposed to them. They last three to four months in a woman. I've done thousands of pellets in the past, even before it became en vogue. I was doing them back in the '90s. The difficulty with that time was it was difficult to find a good compounding pharmacy in the U.S. that could make a good release pellet. It was either too hard and didn't release, or it was too soft and it crumbled. You'd get a massive release and they would have huge side effects, they would hate your guts. The difficulty is you can't take them out.

Wendy Myers: Yes.

Lester Lee: If you put a pellet in, especially let's say testosterone, testosterone converts to estrogen. Let's say they become too estrogen-dominant when their levels are really okay, or on the low side. Now they're stimulating all of that activity and getting acne, they're getting water retention, puffiness or difficulty losing weight. Testosterone converts to DHT, dihydrotestosterone, it inhibits follicle hair growth. Their hair can fall out, if they're more prone to it as a woman, and some women are. I've seen them in my practice, monthly. Their hair's falling out in big patches. They're upset. They go back to the doctor, but I can't take them out.

Lester Lee: Unfortunately, they're in there for six months. I shied away, 10 to 12 years ago, from doing pellets because once I put them in for whatever reason, I can't take them out. However, over the last 10 years, there are a number of good

companies and compounding pharmacies in the U.S. that make better quality pellets. Let's say I was doing them in the '90s when it was more novel or new, I'd have been an outlier, frontier person in the mid-'80s, introducing hormone replacement therapy. Not synthetics. Bioidentical was back in the mid-'80s, but it wasn't heard of here in Orange County.

Lester Lee: I frontiered it. I took a lot of heat from the endocrinologists, from fellow peers and primary cares, but my patients were doing well. They were doing remarkably well. They were feeling better; their cognition, their memory, their skin quality, their leanness, they were losing belly fat. They would go back to their primary care doctor and say, "How come you didn't put me on this stuff like Lee did?" Again, because they don't know about that stuff. Groups like the American Academy of Anti-Aging Medicine, functional medicine groups and doctors like naturopaths are trained in that kind of medicine much more so than conventional MDs, like myself. I didn't learn about any of this when I went through med school through Davis, or even residency, because that's not what they train us in. It's conventional medicine.

Lester Lee: As far as the mode of delivery, there are some women who said, "You know what? I've got to put this on every day. It's messy, it's caulky, and there's the potential for transmission to man, woman or child. Can I go ahead and do the sublingual lozenges?" Sure. "But you know what, they're not working? I still don't feel any different". Well, maybe it's the wrong dose. Let's increase the dosage or more optimize the dosage. "I still don't feel any different." Okay, maybe with an insulin syringe, let's try low dose testosterone. Usually not estrogen, because testosterone does convert to estrogen metabolites. They're getting more estrogen without giving them estrogen.

Lester Lee: I have a number of ladies who do extremely well, beautifully well, with low dose testosterone, let's say 10 to 15 milligrams of testosterone every 10 to 15 days, with an insulin syringe. I don't necessarily have to put them on estrogen because they're getting both through testosterone and the conversion of testosterone to estrogen. There are pellets, trokies, intranasal forms which are probably not as cost-effective and it irritates the mucous lining so maybe when they place it in their nose, they sneeze it out. I tend not to use the intranasal forms. Compounding pharmacies say, "Hey, it's well received," but I haven't found that in my own patients.

Wendy Myers: **Can you talk to us about how long a woman should go on hormone replacement therapy? In the past, they said roughly five years. That was the recommendation to prevent bone loss, because estrogen is very bone protective. What does the research show now?**

Lester Lee: I think my oldest female patient on HRT is 82 years old.

Wendy Myers: Love it.

Lester Lee: She's vivacious, has energy, jets back and forth between the East Coast and West Coast. She runs three different companies from coast to coast. She said she'll never get off of her hormones because it gives her so much energy. She's very lean. She works out seven days a week at home. She works with little weights. Here's an individual at the age of 82. Her DEXA scan is perfectly normal. There are no signs of osteopenia, when we look at her T-scores.

Lester Lee: Back to the question of "how long?" I'm not opposed to women being on intermittently, and cycling off and on, forever, because they feel better on. If we take them off, let's say testosterone, they lose part of that libido, motivation and propensity for having clearer thoughts. They said, "It's diminished when I go off my DHEA or testosterone." I just let them know, whatever year you want to go off, you're welcome to. Again, normally we're going to titrate to the lowest dose possible, just so it takes care of any symptoms that you may have.

Lester Lee: Progesterone? If they want to be off estrogen, that's great. If they want to be off testosterone, that's great. I don't have a specific timeline for them. But again, we're concerned about coronary artery disease. You take away the estrogen, they're more prone to CAD, coronary artery disease. They're more prone to osteopenia or osteoporosis, especially if they have a genetic predisposition, or certain medications that they're taking makes them more prone to that. DHEA, there are a number of women that are on DHEA, but they're not any progesterone or testosterone. The DHEA, downstream, helps make more testosterone and testosterone converts to estrogen. There are several hundred of our female patients, that's all they're on. They're perfectly happy with that.

Lester Lee: As far as the timeline, I don't really have a timeline that they should be off of it, in terms of forever, because they just feel so much better. Especially when it has to do with motivation, cognition or quality of sleep. They feel better when they're on an optimized regimen of the hormones.

Wendy Myers: I have a friend of mine that's been on HRT for 20 years and she's in her 70s. She feels great. She looks great. She's super happy. I was just curious if there were any contraindications for health issues or anything else, if you're on hormone replacement therapy long-term.

Lester Lee: As far as the comorbidities like diabetes or hypertension, I see them actually being higher when they come off of their hormone program. Again, we want the cardioprotective benefits and the bone health benefits of the hormones. One of the huge fears of patients is "I don't want to lose my mind." Well, the brain has testosterone and estrogen receptors so that helps with the cognition. Studies also show decreased incidences of dementia. Pregnenolone is excellent for cognition and memory. Downstream from pregnenolone, it makes cortisol, makes progesterone, makes testosterone and estrogen.

Lester Lee: We don't know, the literature isn't clear. I have patients who've been on for over 35 years and they're now in their 70s or 80s. I think my oldest male patient is 97

and he's still on testosterone, low dose transdermal. When he wants a little bit of boost, because his young girlfriend of 53 and him are going on vacation, he switches to injectable because he gets that little more of a boost.

Wendy Myers: He sounds awesome. I'm loving it. I love it because people are living so long today and they want to have a healthy quality of life. They want to have an amazing relationship and you can do it through biohacking and through preserving your body's normal function. Today, we have a choice. We don't have to age. We don't have to be forced into aging. There's a lot of things in our power and control that we can use to preserve our youth.

Lester Lee: I agree.

Wendy Myers: Yes.

Lester Lee: As you know, Wendy, we can't necessarily control our heritage and genetics. But via epigenetics and nutrigenomics, those are variables we can change now with the state of art of medicine, especially functional medicine. I'm an internist by training. But, functional medicine and hormones is what we do here in the office. We have multiple physicians from plastic surgeons, to general surgeons, cardiologists and now endocrinologists. I have three, who actually refer patients because this is not their training. They're conventional endocrinologists and there is nothing wrong with that. I'm conventionally trained as an internist, there's nothing wrong with that, either.

Lester Lee: It is just that it's a more proactive approach to somebody's health. That's why they're coming in, and they feel so much better. Along with that program, I send a copy by email or fax, to their primary cares, to their internists, endocrinologists or cardiologists. "What are you on? This is why they're feeling better. Maybe come into my office, doctor whoever you are, and I could show you or teach you or train you or mentor you on a few things about basic hormone replacement therapy, or thyroid or cortisol or nutraceuticals". You're huge in nutraceuticals. Dr. Singler, my office, being a naturopath has a stronger background in nutraceuticals than I do. I learned from him about that. He handles a lot of our optimization program for nutraceuticals.

Lester Lee: I know a lot of different ones, but I'm probably not as proactive on loading people up, excuse me, I shouldn't say loading people up, but placing them on a number of nutraceuticals. They say, "Doctor Lee, I take 78 pills now, beside the prescription stuff from my primary care doctor. Now you want me to take omega fish oil, Resveratrol, berberine, bergamot and you want me on this and this? You want more magnesium, you want more B complex, you want that?" "How do I take all this stuff because I'm taking two to three handfuls a day?" I understand. Expenses are a consideration, too. Pharmaceutical grade nutraceuticals are not inexpensive.

Lester Lee: I talked about that before a meeting this past weekend, that was in Vegas. When we have somebody who wants to be more naturally treated, nothing prescriptive, that's what we do.

Wendy Myers: Great, that was my next question. You read my mind because I was going to talk about supplemental pregnenolone, DHEA, wild yam to promote progesterone or estrogen, rather. We can even have your colleague on to discuss that as well, because for some women, those over-the-counter remedies don't work. They don't produce the results that they're hoping for. Perhaps there's a quality issue. Perhaps there's a timing issue or a pathway issue going on, that then leads women into your office to do prescription HRT. A lot of women listening are trying pregnenolone, hoping that downstream that might make some testosterone and perhaps doesn't work.

Wendy Myers: What are some of the problems you see with supplemental over-the-counter supplements to try to produce hormones?

Lester Lee: Well, one, we like to utilize pharmaceutical grade quality. That's not just off brand but again, they cost more because they are "pharmaceutical grade." There are multiple great companies out there from Pure Encapsulations, Standard Process, Metagenics for their Molecular, Designs For Health, we can go on and on and on. Part of that has to do with cost. If costs are not an issue, then maybe gastrointestinal intolerance or just a fatigue of taking so many items every day. I normally try to minimize as much as possible the number of nutraceuticals.

Lester Lee: I'm not opposed in any way to nutraceuticals. I'm a great believer in Wendy Myers Detox programs. For almost every male and female patient that comes in the office, if they haven't been on a detox program, we put them on a detox program. We detox the liver and detox the gut. It helps them to lose weight, improves skin quality, water retention and metabolism are all optimized. There are multiple companies who make great programs. I can't say one is better than the other. You have a great detox program.

Lester Lee: I've had a number of patients who've taken and been on your detox program, they love it. They lose weight. Their cognition is better. Their skin quality is better. I think water retention is less. I would say that from a hormonal point of view, because that's my direction with patients here, that's the reputation. If they're choosing let's say adrenal support, cordyceps and adrenal adaptogens, I'm a great believer, and we try that. Unless they're really low, near being Addisonian. Then we may use cortisone acetate. As much as possible, my approach is to change the nutraceutical part of it, just try for a month. If not, let's go ahead and add something stronger than estroven, something stronger than just your black cohosh, your sweet yams or your botanicals. We do try a natural approach first.

Wendy Myers: That might be a great segue into, if you're like me, I'm just beginning to have symptoms and really mild hot flashes and things like that. I'm going to be doing natural things for that, to start. But, I don't want to suffer. I don't want to have all the symptoms that you listed previously. I don't want to deal with that. At some point that might be right for me. The reason I wanted to do this podcast was to illustrate to people that hormone replacement therapy is very safe. The research is showing that it is a great option for women so they can live the life that they want to.

Lester Lee: Even with gut health, sometimes when we just put them on a great probiotic. We help detoxify the liver, the gut and they lose weight. But interestingly, as you know Wendy, our microbiome is the heart, 78% of our immune system. When we re-regulate and optimize the good bacteria there and get rid of the bad bacteria, or we change the commensal organisms in balance. They're hormones, as you know, and they work better. We've now up-regulated the pathways by cleaning up the gut. They don't have as much hormone disruption, and they're actually getting an increase in their hormones without putting them on hormones, just by cleaning up the gut.

Wendy Myers: **I think that's a great thing to do, optimize the gut, liver, maybe just some supplements in the beginning. Then if that doesn't work, graduate to the stronger prescription, HRT. I think that's a great pathway. Can you discuss the phenomenon of estrogen dominance syndrome, when one has low estrogen levels on testing via CRM or what have you? What is the role that xenoestrogens play in this issue; like metallo estrogens, plastics, BPAs and all these hormone-mimicking chemicals that are in our environment?**

Lester Lee: Wendy, you hit every one of them! That was my response. The estrogen-dominance in proportion, say, to progesterone. As we get perimenopausal, the first hormone that usually decreases is progesterone, which can cause heavier cycles and premenstrual mood swings. Let's say, the serum or urine estrogen is low, but the important part to know is it a good estrogen or is it a bad estrogen? You hit upon that, the xenoestrogens, the contaminants, the toxic things that we're exposed to; the parabens, the VCPs and all the other things that we are exposed to from mascaras to sunscreens to the plastics and the bottled waters. Again, women more so than men, are exposed to the xenos in disproportion to the progesterone that's continuously decreasing after the age of the 20s and 30s.

Lester Lee: We may have an individual who may have normal progesterone or they may have really low progesterone. The estrogen itself is low, but it's dominant over the progesterone. Now, we have abnormal pathways of estrogen dominance, even though the serum or the diagnostic lab says they're low in estrogen.

Wendy Myers: That's one thing that I think is really perplexing to a lot of women where they don't understand that they have low estrogens on their testing, but they're technically estrogen-dominant. That's really confusing.

Lester Lee: Back to estrogen metabolic pathways, let's say, by urine. I like that to start that one in the majority of women because I want to know if I'm going to place you on a bioidentical, how are you going to metabolize it? You're going to pass it through this pathway, four pathway, two pathway, six pathway whatever pathway because of your genetics. That also tells us the proportion of Estradiol/Estriol combination we call bi-est, which is two estrogens. We think about three estrogens, the bad one, "estrone." That's the one that has one hydroxyl molecule, the other one has two hydroxy and the other has three, so therefore, bi, tri, just as for the layperson.

Lester Lee: There are some individuals, we find that their pathway is predominant, then sometimes they're only on something like one part of the hormones. Maybe just estradiol. Maybe they don't need estriol. Again, it's personalized medicine, as we call it. It's individualized based on your genetics, your epigenetics, your pathways, your history, your symptoms and expectations too, as a plastic surgeon, which I'm not. I would like a certain nose, where are the expectations? In other words, "I have all these symptoms. These are my expectations, Dr. Lee. I want to look just like "so and so" and be on "such and such" a program". I said, "We can help optimize the hormones. We can help optimize your nutrition. We can help with cognition, your skin, your hair, your sleep quality and your libido. Physically, we can help that too, but you're never going to look like him or her.

Wendy Myers: Yes.

Lester Lee: I try to manage expectations, too. There are some patients that say, "You know what? I feel better, but I still don't have muscles all over where I should have muscles, because I work out every day. Look at my back." Remember we're talking about a female patient. I want to be a bikini model or competitor, which in my practice, I have a lot of those competitors. They say, "I can't just do this by hormones." I agree. I can't say to work out more because you're already working out twice a day, seven days a week because this is what you do for a living. Sometimes expectations don't necessarily correlate, it's a balance of not just the hormones. It's a balance of their expectations with the rest of the picture.

Wendy Myers: Yes.

Lester Lee: I got off on a tangent on the question.

Wendy Myers: **No, that's good. That's a good point to make. How often does someone need to come in to tweak their hormones, for instance? My understanding is that once someone goes on hormone replacement therapy, they need to monitor that or they need to tweak it. How often, on average, does someone need to come in?**

Lester Lee: Well, in our office, during initial consultations, we get the history, the physical, and the symptoms. We do the appropriate diagnostic labs based on all of the above. They come back a week or two later and we review the labs. Then we

suggest a program. They'll be back in, say, six weeks. Any residual symptoms, we need to correct. Of course we're retesting at that time. We're correcting the hormones again. Once they're dialed into whatever program, in my practice, I only see them twice a year.

Lester Lee: They're welcome to call the office at any time for another question about application and about, say, breakthrough bleeding where it was regular before and all sudden not. Keep in mind also, the reason why I see them every six months or seven months is because their hormones will continuously change as they mature. If it's not the estrogen, progesterone, testosterone or DHEA, then it's maybe the cortisol or thyroid, because they talk to each other.

Lester Lee: It's not necessarily the estrogen, progesterone or testosterone. Maybe now we need to adjust cortisol support with adaptogens, that's why your thyroid doesn't work. Your T4 is not going to be reactive to T3. Of course, conventional medicine, they're not going to know that part.

Lester Lee: For safety reasons, yes, I like to see them twice a year. For women, we want to make sure they have their annual female exam and mammogram. For men, we want to make sure that they're not getting testosterone parasitemia, too high blood count, because blood is like Pennzoil, and is more prone to clotting events, heart attacks and strokes. Men need their liver enzymes, lipid panel and PSA, to make sure that they're not developing a genetic predisposition to prostate cancer. Testosterone does not create prostate cancer.

Lester Lee: But if genetically you're getting it, you're going to get it. However, if you get prostate cancer, I tell the men, testosterone can fuel it and make it more aggressive. That's why for men, they come in at least twice a year. For women, we monitor similarly, they don't have a prostate so we don't look at PSA, but we make sure if they're on testosterone, that they're not getting too high of a blood count, that their liver is okay, that their lipid panel is okay. Some individuals are diabetic.

Lester Lee: Our role for the diabetic patient is to help them become more insulin resistant and help get off their diabetic medication, that they've been placed on by their primary cares or or their SSRI. We like to get them off of their sleep meds. Again, we're trying a functional naturopathic approach. Fortunately, we're mostly successful doing that. For those individuals who are just more challenging, that's great. We love that, too. Besides Dr. Singler and myself, we also have a nutritionist on staff, we have a compounding pharmacist on staff and a glucose pharmacy, right here in Huntington Beach. We work hand in hand with them. They do a great job. Anything we wish to compound from oxytocin to increase cuddling hormones, orgasms and sexual libido, in men and women, to intranasal forms to skin blemishes, what have you, it's great to have glucose pharmacy because they specialize in the hormone stuff that we do.

Wendy Myers: I find that really interesting that managing your hormones can improve insulin sensitivity and help one to get off diabetic medications. I'm sure that most

doctors that are prescribing metformin and other diabetes medications have zero clue about the hormone component.

Lester Lee: That's a great observation, Wendy, there are hundreds who, because I've been doing this since '85, longer than most people, have gotten off the blood pressure medicine, off the diabetic medication, off the SSRI. Why? It's not just that we optimize hormones, although that's a strong component of it. We've lowered A1c, they're more insulin sensitive, they're more motivated, they're getting to the gym, they're eating a cleaner diet, they're having an anti-inflammatory diet especially if they are autoimmune, even if they have no other symptoms. You're chronically inflamed if you have autoimmune, you have a carrier gene, so we educate.

Lester Lee: A huge part is the education, as in any practice. The lifestyle, the feeling good before you die of whatever cause, that's our goal. The education part, along with why hormones or why not hormones? You had a question about that earlier. Not everybody needs hormones. I agree.

Wendy Myers: Yeah. It's about what works for you as a person, what you want to do as a person, what your health goals are. Some people don't ever want to take medications and that's perfectly okay. Some people want to feel good until they're the end of their days. That's me. I want to feel really good. When I started experiencing some of my perimenopausal symptoms I was like, "Uh-oh, here we go. This is not very fun". As I said, I have friends that are on hormone replacement therapy and are really happy, they look fantastic. Suzanne Somers has really educated women about the positives, the pros and the benefits of hormone replacement therapy. That is something that some women are going to consider. I wanted to educate the audience a little bit about that, the pros and cons of HRT. Thank you so much for coming on the show.

Lester Lee: Thank you, Wendy.

Wendy Myers: If anyone wants to work with you and learn more about your work, where can they find you?

Lester Lee: I have offices in Huntington Beach, CA and Newport Beach, CA. Our main number is 714-375-1441 and our website is, leemedicalinstitute.com. My Newport office is with Dr. Terry Dubrow from the reality show "Botched." I have a staff there and am there myself, a couple days a week, too. The two offices in Newport and Huntington Beach are about six miles apart.

Wendy Myers: Okay, great. Dr. Lee, you and I need to talk. We'll be talking after the show. Thanks so much for coming on. I really appreciate you sharing your wisdom on the show today.

Lester Lee: Thank you. Appreciate you having me on the show. Thank you, Wendy.

Wendy Myers:

Everyone, thanks for tuning in to the *Myers Detox Podcast* where we explore all kinds of topics related to alternative health, biohacking and everything related to heavy metal detoxification. We look at how health issues today tie into toxins, how toxins are affecting your body and how to detox them. Thanks for tuning in. I'll talk to you guys next week.