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Dear friends,

First of all I would like to say many thanks for all of you, who are listening to this webinar. As for me I'm very exciting of the fact, that every day more and more specialists are being involved in a historic process of changing the stereotypes about human life. Why? Because thanks to all of you, people are going to live longer and better lives. You are those, who are open minded and interested in science. And you are fortunate- because where medicine will go in the next 50 years- is Longevity medicine and you are already here. That is the absolutely truth and if you open any scientific discourse- pubmed, or science direct- you'll find hundreds and hundreds of articles about this fact .

Before we start let me introduce myself- I'm Nataliya Chekalska, MD, Ph.D. My first specialization was endocrinology and I'm a member of A4M and scientific coordinator of European Congress of Anti-aging medicine Euromedicom.

I got my experience since 2003 in a quite difficult way – collecting the information from the congresses all over the world, having private practical training, visiting workshops, reading all of the scientific news about Longevity and of course having my own clinical experience in Longevity. And in my webinars I would like to share with all of you the most practical information you need to start your Longevity practice right now. You do not need to collect all this information piece by piece- I've already done it for you. After this series of webinars you may wish to study further, because you'll be the elite among the elite when you bring Longevity into the lives of your patients.

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In the past, people used to consult a doctor only when they were sick or felt sick . Nowadays the trend is reversed as people believe more and more that Longevity medicine is the best way to enhance their health and prevent sickness

What is Longevity Management Medicine?

Longevity management medicine is an emerging field of medicine devoted to maintaining or enhancing the quality of life as we age. It does not prevent early aging but possibly lengthen our life and alters the way we age to enhance the quality of life as we age.

Longevity management medicine places emphasis on disease prevention versus disease treatment. Its medical protocols involve extensive initial laboratory baseline testing, hormone balancing, IV longevity therapy, laboratory test monitoring, patient education, proper diet, nutritional supplementation and appropriate exercise.

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I'm in my forties and when I was growing up, we had an old (because anyone over 30 seemed to be old), really old neighbor Mrs. Anna born in 1896. She would do exercises on her balcony every morning in almost any weather conditions. She also stood out in my mind because – at the time – it was really rare for someone to live to 100 ... not to mention living an active life at 100.

Now, 65-year-olds are younger than ever and 100-year-olds aren't as rare as they once were. There are an estimated 72,000 centenarians in the United States today and there could be as many as a million by 2050. As the Stanford Center on Longevity puts it in the [New Realities of an Older America](#):

In less than one century, life expectancy has increased an average of 30 years in developed regions of the world. This added longevity is, at once, among the most remarkable achievements in all human history and one of our greatest challenges. More and more Americans are reaching old age, and older Americans are making up a larger share of our total population.

Stanford Center's excellent report notes that "the number of old people – age 65 and over – will

double over the next 30 years.” The description of anyone over 65 as OLD conflicts with the way Baby Boomers and Silent Generation members see themselves. How could they be old when [Boomers are launching businesses in record numbers](#)? Their neighbors are getting re-married at 82? Or taking Hollywood by storm at 89, like [Betty White](#)?

Many marketers are focusing on [what Boomers will inherit](#) but for many, that ship won't come in for another 10-20 years. Until then, Boomers will be spending their time & money on maintaining their own lifestyle and health, as well as caring for older parents/family members.

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Let me give you some examples:

Lionel Ferbos, the oldest practicing jazz musician in New Orleans. Around the world, there are other centenarians and near-centenarians doing amazing things and proving the his age is just a number. Canadian Ida Herbert was recently been named by the Guinness Book of World Records as the oldest yoga teacher at 96 years.

Then there's 101-year-old Fauja Singh, also known as the “Turbaned Tornado” according to [this Daily News article](#). As the world's oldest marathon runner, he is a testament to both the power of perseverance and the capacity for reinvention; he began running marathons at the age of 89.

According to *Aging in the Twenty-First Century: A Celebration and a Challenge*, a report by the [United Nations Population Fund](#) (UNFP), “the population aged 60 or over is growing at a faster rate than the total population in almost all world regions.” In addition, “The number of people who turn 60 each year worldwide is...equivalent to almost two people every second.” What's more, the older population itself is aging. UNFP reports that “The number of people aged 80 or over (often referred to as the ‘oldest-old’) has been increasing more rapidly than the older population as a whole.

So, what can you do in your everyday practice to be in this movement of helping people staying younger? How can you expand your practice, doing something amazing and raising your income? What new advice can you give your patients to improve their lives? The answer is: You may add Longevity medicine to your practice.

A new approach to the management of aging is to treat aging as a disease caused by a process of mental and physical deterioration, resulting in age-related dysfunctions and disorders.

You may ask:

Which of my patients would benefit from Longevity Medicine? What age must they be?

All of your patients beyond 35 years of age are excellent candidates.

Why? Because from that time our aging process starts to going faster and faster, our primary steroid hormones start to decline, inflammation spreads all over the body. Do you have patients older than 35? If yes- you can begin immediately after this webinar to give your patients the opportunity to stay younger and healthier for a longer period of time.

And my advice is to tell your patients the truth- can we stop the aging clock-NO. Can we reverse the aging clock- in some areas maybe or slightly. May we change the speed of aging-Yes! That is why it is very important to do everything with the right timing, to involve the people who are already need your help in Longevity and to invite their children and even their grandchildren in the educational process. It's time to prepare a new generation for long and high quality life. Doesn't that seem amazing?

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Ok, let's touch on the topic of what you can specifically do in Longevity medicine.

First, tell your patients, that aging is a disease???? which can be prevented or reversed and you that you can modify the aging process. And you may do it without doubt. The result- people getting physiologically younger from improved cardiovascular status, metabolism, memory and energy, to simply getting more enjoyment out of life.

We age because our hormones decline and this is the one of multifactorial causes of aging. What you learn from listening to these webinars? You'll be ready to add Longevity Hormone Replacement therapy and IV Longevity Therapy to your practice.

Just a quick remind that steroid hormones are important physiological regulators in the body and they all originally come from cholesterol. Only two tissues in the body possess the enzymatic apparatus to convert cholesterol to active hormones. The adrenal cortex makes cortisol (the main glucocorticoid hormone), aldosterone (the principal mineralocorticoid in humans), and androgens. The gonads make either estrogen and progesterone (ovaries) or testosterone (testes). In each case, production of steroid hormones is regulated by trophic hormones released from the pituitary. For aldosterone, the renin-angiotensin system also plays an important regulatory role.

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Cells that produce steroid hormones can use, as a starting material for hormone synthesis, the cholesterol that is circulating in the blood in association with low-density lipoprotein. Alternatively, these cells can synthesize cholesterol de novo from acetate. In humans, LDL cholesterol appears to furnish 80% of the cholesterol used for steroid synthesis. An LDL particle contains both free cholesterol and cholesteryl esters, in addition to phospholipids and protein. The cell takes up this LDL particle through the LDL receptor and receptor-mediated endocytosis into clathrin-coated vesicles. Lysosomal hydrolases then act on the cholesteryl esters to release free cholesterol. The cholesterol nucleus, whether taken up or synthesized de novo, subsequently undergoes a series of reactions that culminate in the formation of pregnenolone, the common precursor of all steroid hormones. Through divergent pathways, pregnenolone is then further metabolized to the major steroid hormones. The same is true for thyroid hormones

Like cholesterol itself, steroid hormones are poorly soluble in water. Upon their release into the circulation, steroid hormones associate with specific binding proteins (e.g., sex hormone-binding globulin) that transport the steroid hormones through the circulatory system to their target tissues. The presence of these binding proteins, whose concentration in the circulation can change in response to a variety of physiological conditions, can complicate efforts to measure the amount of active steroid hormone in the circulation.

Thyroid hormones bind to intracellular receptors that regulate metabolic rate. In many respects, the thyroid gland and thyroid hormone are unique among the classic endocrine axes. And we'll discuss that topic at our Thyroid webinar.

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Steroid hormones appear to enter their target cell by simple diffusion across the plasma membrane. Once within the cell, steroid hormones are bound with high affinity to receptor proteins located in the cytosol or the nucleus. Binding of steroid hormones to its receptor results in a change in the receptor conformation so that the active receptor-hormone complex now binds with high affinity to a specific DNA sequences called hormone response elements or steroid response elements (SREs). These sequences are within the 5' regions of target genes whose transcription is regulated by the specific steroid hormone-receptor complex. The receptor protein may be modified in a manner that permits dissociation of the hormone and DNA. The receptor itself could then be recycled and the steroid molecule metabolized or otherwise cleared from the cell

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And what must do is to maintain the balance between all of the hormones in our body to stay in good health, and to prevent diseases from developing.

It is a topic that is close to my heart because I strongly believe that hormones are central in ensuring that all the functions and processes in the body run smoothly.

Hormonal balance is a complex subject because there are so many hormones in our body and we are still learning new things about their relationship with each other.

In the Hormonal Balance webinar, I will provide a basic understanding of what we call the hormone symphony – the harmony between many different hormones, each playing a different tune, but coming together to create a well-balanced melody.

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Hormones produced in the endocrine glands and other places in the body circulate through the bloodstream. Hormones interact with receptor proteins of specific enzymes, igniting biological responses in target tissues. Cellular activity changes and is dispatched across the plasma membrane. Every hormone has specificity, housing an individual chemical form corresponding to a particular receptor protein. When the two meet, they interlock like puzzle pieces. This receptor protein can exist in different organ cells, so the body can use the same hormone for various effects. The relationship between a steroid hormone and its receptor is often likened to a lock-and-key relationship. The right key has to go with the right lock or the door doesn't open. As long as the teeth on the key are intact, the key will unlock the lock; therefore, you can hang anything you like off of the non-teeth part of the key. Your key chain, although attached to the key, does not interfere with the key's ability to enter the lock.

The last piece of this puzzle is the result of the unlocking process. If the hormone/key fits into the receptor/lock, the door opens. In physiological terms, the door opening means that the cell's receptor has been activated and will cause a change in gene expression. To put it simply: one key, one lock, one result.

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A complex negative-feedback pathway regulates fluctuating hormone levels. As hormone levels rise, the pathway is inhibited to maintain homeostasis. Regulation depends both on production levels plus the excretion and metabolism of hormones. A number of other factors stimulate or inhibit hormonal secretions:

- environmental changes
- plasma concentrations of nutrients/ions

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Seven major endocrine glands comprise the whole system, communicating from various points throughout the body. There are many other components of the system where hormones are being created and secreted into parts of the body—such as the stomach, small intestine and heart. These also provide hormonal activity to help regulate physiological function. The relationships among endocrine glands cause them to work together with a unified purpose and function, releasing chemical messengers that impart cellular instructions.

Think of it as a symphony orchestra, playing Beethoven's Ninth Symphony. Producing this beautiful work takes 100 instruments and a large choir. All must perform in perfect balance-without one instrument, section or singer eclipsing the others.

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If you treat adult GH deficiency or adult testosterone deficiency you may prevent reverse some aspects of aging. And we'll spend considerable time on Bio-identical hormone replacement therapy reviewing its safety and the benefits are huge in both men and women.

It is obvious that progestins are not progesterone. We'll discuss the thyroid and we'll see that people with normal range could be clinically hypothyroid and we'll know what kind of lab test could prove it.

The goal of treating hormone deficiency is to improve the quality of life. And our lab tests will prove that our interventions will not increase the risk of cancer or cardiovascular disease. And the first part of your intervention is to understand the patient's comfort zone - I mean his optimal range of lab tests. It is important to understand that the root of hormone application is a work in progress. As the scientific data changes, we must be flexible and ready to change. So, stepping back why do the hormone levels decline? What is the evolutionary biology? One might ask if there is some kind of benefit to hormones declining? - Less cancer risk? We'll see that as long the hormone levels are at the optimal range, the less risk of cancer your patients will have.

We must also understand that there are 3 estrogens, and that T3 is the active hormone and T4 is a pro-hormone, cortisol is the first line hormone, and again we have a difference ranges. We must always remember to ask the patient: "How do you feel?"

What makes hormones unique is that they work in tandem with each other – they send messages to each other and to the organs that they control, constantly telling each other whether to release more or less.

A delicate balance exists between all of the different hormones in our body. When in balance the body's systems are stable, but as soon as that balance is lost unwanted symptoms, disorders, and disease can occur. With age hormone levels fluctuate, and then decline triggering what is commonly known as the symptoms of Menopause in women and Andropause in men. We must also be aware of somatopause, dermapause, decline of melatonin, pregnenolone and DHEA deficiency, thyroid deficiency caused by declining hormones levels.

There are many conditions that can interfere with the normal function or production of a hormone. If you are in a situation where you have too much or too little of a hormone, or it is unable to send signals to other parts of the body, it can disrupt the balance of everything in the body.

Hormones – in both women and men – have many important functions in all of the organs, affecting all aspects of our physical and mental health.

Hormone imbalance can produce a whole host of symptoms in women, many of which are often ignored or mistaken for other conditions.

Signs like fatigue, weight gain, insomnia, hot or cold sweats, migraines and headaches, hair loss, low libido, depression and irritability could point to hormone imbalance.

While many of these are non-specific symptoms, as a doctor you should suspect a hormone problem if there are no other physical conditions exist that could be the cause.

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Hormones are also related to the aging process, and I strongly believed that maintaining optimal hormone balance could potentially delay the premature effects of aging.

Take estrogen and testosterone, for example. Estrogen alone helps protect against heart disease, osteoporosis, Alzheimer's and incontinence, as well as enhancing libido, skin tone, emotional well-being, cognitive acuity, sensory function and digestion. Testosterone improves libido and energy levels, enhances a sense of well-being, strengthens bones, builds muscle, and promotes muscle tone, brain function, and heart health.

Consider DHEA and Cortisol. DHEA works closely with Cortisol to protect against stress, cardiovascular disease, osteoporosis, and Alzheimer's; as well as preventing wrinkles and dry eyes, increasing libido, raising energy levels, and boosting memory and immunity. Cortisol helps regulate blood pressure, increases energy and influences metabolism, and also helps your body cope with stress and infection. If the body is under persistent 'attack' by stress factors – perhaps due to unresolved problems in the patient's life or a medical condition – he will suffer from adrenal fatigue-

lack of cortisol. And to understand the real situation you as a doctor need to know the DHEA level, as well as the ratio of DHEA and cortisol.

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Hormones perceptibly alter physical, sexual and cognitive functions, often with psychological complications. Until recently, these changes were accepted as “growing old”. Outwardly, a middle-aged man may have increased abdominal fat and reduced lean muscle mass—hallmarks of hormone imbalance. He no longer looks or feels virile, as his sexual functions fade. As a result, self-esteem begins to suffer. The story isn’t that different for women. In fact, both genders suffer when hormone imbalances develop, which results in physical and emotional stress.

We now realize that delaying premature disabilities is possible, since the body’s hormone receptors don’t lose their ability to respond to hormone messages. These receptors are waiting to be filled. Restoring hormonal balance with hormone optimization and healthier lifestyle choices really can turn the tide.

For example, Testosterone output decreases approximately 1% per year, starting at age 35. Men begin to form more estrogen, which stores in fat. A typical 50-year-old male at normal weight has more estrogen than his female, postmenopausal counterpart. These higher estrogen levels ultimately compete with testosterone for the same receptors. In addition, an increase in sex hormone-binding globulins (SHBG) takes up even more of the free testosterone. This loss of testosterone contributes to a middle-aged man’s “pot belly” and reduced muscle tone. The differences between the sexes are quantitative, not qualitative. Both genders may need additional hormones to get their bodies back in balance, if testing reveals diminished levels.

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Another most important paradigm is that the Aging process is different for men and women.

It’s well known, that more than 99 percent of male and female genetic coding is exactly the same. Out of the thirty thousand genes in the human genome, the less than one percent variation between the sexes is small. But that percentage difference influences every single cell in our bodies—from the nerves that register pleasure and pain to the neurons that transmit perception, thoughts, feelings, and emotions.

Look at the brain - what are the same parts of the male and female brain responsible for? You see that the same parts of the brain play completely different role in the social and psychological activities in men and women. What is the secret of those differences? The answer is one- Sex hormones.

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Not only does the male and female body respond differently to aging, the male and female psychology does too. Taken together, aging for men and women can be an entirely different experience.

So, hormones play out differently in men and women as they age. For women, [estrogen and aging](#) is a major concern, especially during menopause and after. For men, [testosterone](#) is the dominate hormonal component of aging.

If you compare a man and a woman a 35 – 40 years old - you may think that women is little younger than the man, especially if she is using aesthetic medicine. Comparing them at 50- they will look the same age and do not forget that women have a greater utilization of aesthetic medicine. If you’ll see the same couple at 60- in spite of all cosmetic and even plastic efforts men will win the competition- the man looks younger. Why? Because of the gender difference in aging process.

Let’s take a closer look:

On average, a man's testosterone levels begin to decline at a rate of 1% per year after the age of 35, but even in his 80 he will have very low- but at least some level of testosterone.

Let's look at the situation in a woman's main hormones- she has almost zero decline from 35-40 after which you may see the beginning of the process, but at the age of menopause her estrogen and progesterone levels will be almost zero. She may spend almost one third of her life with her level of zero. And if we remember that estrogen has more than 400 functions in a woman's body- will she have a high quality life? We'll spend two webinars devoted to the subject of women's sex hormones, but let me remind you of one simple thing- after menopause, collagen- the main protein of the skin- has annual decline of up to 5%. Now it's clear why at 60 years of age after 10 years of physiological menopause women look older than men of the same age.

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And if we look deeply to the psychology of gender fears- the most powerful fear for men- is the fear of death. What is the most powerful fear of women? The fear of aging. Why? Because both have the same fear- life without sex hormones. What causes the fear: stress- aging- disease. So, to the level that the sex hormones are in the optimal range, the greatest fears of your patients will decrease.

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The next step is the most exciting of all. I'll be talking about how to clinically use hormones in your practice

How can you, as a doctor, can help your patients balance his or her hormones? Of course, the most important step is to choose the right high quality medications, with the least side effects. This brings up the topic of Bio-identical hormones.

The interest in a more natural approach to hormone therapy has focused attention on bio-identical hormones — hormones that are identical in molecular structure to the hormones made in the human body. They're not found in this form in nature but are made, or synthesized, from a plant chemical extracted from yams and soy. For example Bio-identical estrogens are 17 beta-estradiol, estrone, and estriol. (Estradiol is the form of estrogen that decreases at menopause.) Bio-identical progesterone is simply progesterone. It's micronized (finely ground) in the laboratory for better absorption in the body.

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Bio-identical hormones have the same chemical structure as the hormones made by the human body. However, structural differences exist between bio-identical hormones and those available commercially, which are typically synthetic like esterified natural progesterone and medroxyprogesterone or animal derived such as conjugated equine estrogens. In order to be patented, synthetic hormones have side chains added to a natural substance. Synthetic hormones are not found in humans, and are not identical in structure or function to the bio-identical hormones they are intended to replace.

Are Bio- identical hormones (BIH) safe? BIH exist naturally in the human body, so it is axiomatic that they are safe. However, we are interested in a slightly different question. What is the safety of BIH as routinely used in medical practice? Let me answer this question.

According to an FDA press conference January 2008 there are no reported adverse events from BIH. But here again, that tricky word *natural* muddies the waters. Pregnant mares' urine is natural, but Premarin is not bio-identical, at least not to human estrogen. The same goes for Cenestin, which is made from plants but is not bio-identical. Different forms of hormones are recognized differently by cells, so it makes sense that their effects might also be different.

Technically, the female body can't distinguish bio-identical hormones from the ones the ovaries produce. On a blood test, total estradiol reflects the bio-identical estradiol the patient has taken as

well as the estradiol her body makes. On the other hand, Premarin is metabolized into various forms of estrogen that aren't measured by standard laboratory tests. Proponents of bio-identical hormones say that one advantage of bio-identical estrogen over Premarin is that estrogen levels can be monitored more precisely and treatment individualized accordingly.

This is not to say that bio-identicals are perfect or are without potential dangers. In truth, although there are a number of studies showing their effectiveness and safety, there is not an extensive body of large-scale studies as there is for the conventional HRT's. However, logically, the bio-identicals should be safer than the synthetic hormones because the body already has enzyme pathways which work perfectly with the bio-identicals. We are also able to prescribe precise, individualized dosages so that physiologically normal levels can be maintained.

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There is another important think to keep in mind - The delivery method. Why is it better to use transdermal forms? Because when you give the hormones orally you will see higher metabolism, you only get the first pass of the hormone and that is not optimal. When estrogen is taken as a pill, it is first processed through the liver. This stimulates proteins associated with heart disease and stroke, such as C-reactive protein, activated protein.

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Let's discuss Converting Administration Routes

As you see topical administration needs less dosage.

Now, let's discuss how to make your BHRT practice higher quality and safer.

How do you decide which company or medication to choose in order to make your Longevity programs more affective and safe?

AS for me personally I really believe in Compounding Pharmacies. Why?

First of all from my own experience- for more then 10 years I have never encountered any side effects. However, I have seen huge improvements in health status of my patients including emotional being. But nowadays it appears as though we are involved in a war between

Compounding Pharmacies, the FDA and Pharmaceutical Companies. And of course, as a humans we understand that sometimes we can be a victim in someone else's war. What shall we do? - Do your best for your patients. Choose the best compounding pharmacy- do not trust advertisements.

The risks or benefits of any hormonal product depend more on than how the hormone is made.

That's why it's important to work only with FDA- approved bio-identical hormones and only with compounding pharmacies with excellent references. You'll find a list of them in the documents associated with this webinar.

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The next step- How do we measure hormone concentrations? Of course, the first thing we have to do is a clinical exam to measure the impact of hormones. There are lab tests that are useful and especially a blood test and 24-hour urinalysis. When discussing lab tests, it is important to consider how often you should do them. You do not need to repeat them every week. If you are doing HRT it takes 2-3 months to rebalance hormones levels, there must be sufficient interval of time between the tests.

For example, if you do Testosterone therapy there must be 8 to 12 hours after the last application and the lab test. Not after 1 hour- because you'll have a peak of testosterone, not after 24 hours because you'll have the lowest values. You need to measure the average values.

Rechecking the lab tests in 5-6 months is a good period to monitor how the treatment is going for most hormones.

How do you perform the test? You cannot do the test for example, during initial visit - some of your patients drink coffee, others eat snacks. That is not the best condition- for example, coffee is a diuretic, which concentrates the blood and you should not do the hormone test because many of hormones are bound in the blood on proteins and if you have a lack of water in the blood the proteins will artificially higher and the levels of hormones will also be artificially higher and you will have the impression that the patient does not have a hormone deficiency. This is why the patient needs to drink approximately 12-16 oz. of water before doing the test should not eat, needs an empty stomach and should avoid stressful situations. This is very important because if a person is under stress they will have some hormones elevated and some hormones depressed and then you will not have an adequate evaluation. So, the person needs to come to laboratory in a calm condition. Let's move on to the 24-hours urinalysis. The day before and the day of collection the patient must be in a calm condition. No excessive physical exercises- because if they'll do – you'll get the wrong picture. So, on the day of a test the patient starts collecting their urine from 8am to 8am including the last urine from the next morning. Also the patient needs to eat well but not to go to restaurant, because increased salt intake could change some hormones levels such as cortisol or aldosterone. And they should drink the normal quantity of water. And now you must interpret the tests.

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There is a big difference between longevity and classical medicine. We do not treat only the patients who have results, which are far away from reference ranges. Under the law- the reference range is 95 % of the population. But, you need to help your patients understand that the optimal value and the reference range is not the same.

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For example, the standard reference range for free testosterone and DHEA show that very low levels are “perfectly” normal for aging men. It is no coincidence that the same aging men (with low levels of testosterone/DHEA) have high rates of depression, memory loss, atherosclerosis, senility, impotency, high cholesterol, abdominal obesity, fatigue, and a lot of other diseases related to low blood levels of testosterone and DHEA.

When it comes to assessing hormone status, the use of standard reference ranges has failed aging people because reference range is adjusted to reflect a person's age. Since it is normal for an aging person to have imbalances of critical hormones, the standard laboratory reference range does not flag dangerously high levels of estrogen and insulin or deficient levels of testosterone, thyroid and DHEA.

Traditional medical thinking accepts that imbalance of life-sustaining hormones is normal in aging people. Traditional practitioners almost never test hormone levels because they think that nothing should be done to restore hormone profiles to youthful range. More and more, however, aging people are seeking the health and vitality of a younger person.

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How you may calculate the optimal range? Using the reference ranges of your lab, place the high and low values for the normal range of each test in each of the brackets above with the lowest normal range value on the left and the highest value on the right. Different labs have different ranges, so if you use more than one lab, make a different sheet for each lab. Subtract the lowest normal lab value from the highest value for that test. Divide the resulting number by 2. Add that number to the number for the low normal range. This is your midpoint. For example, the standard reference range for Total testosterone is 200- 825 ng/dl. So, $825-200/2+200= 512.5$. So the optimal range is 512.5-825

But be careful- the optimal range of estrogen for men is below midpoint!

From a financial standpoint, I'd love to encourage all of you- not to accept health insurance. I know it sounds very uncomfortable, but if you want to see everybody in your office, please follow that advice. If you do this kind of practice under insurance constraints-you'll go bankrupt. And I mean that very seriously. And I know lot of my colleagues in USA who used insurance and everyone has failed. What I'll suggest is if you have an existing practice you may set up cooperation. For example, you may be doing your internal or obstetrics and gynecology practice everyday but Wednesday. And on Wednesday you may do your Longevity Medicine practice. On that day you do not take any once insurance. What you do not need to do-is to mix Longevity with your prime care practice. In that case you'll not get the cash. Choose one day. And if you see, that your patient needs the Longevity treatment- tell him or her, that on Wednesday, you'll be glad to see him in his or her evaluation day.

Everybody may think, "O my god, someone needs to give me cash!" I know doctors who have 3 years waiting list to see them and they are working in the most economically depressed cities in USA. It's all how you present yourself. You also have to explain to your patients that this is not an alternative medicine- this is biochemistry of the body. Longevity Medicine is the most scientific specialty. But it is different concept and the concept is not treating only symptoms, we must learn know the cause of the problems- why does the patient have high cholesterol, or weight gain. It's also about individualized and customized care.

With the completion of the Human Genome Project the life has changed. 20% is inherited and 80% is environmental , which is great because the success of your practice is not based upon genes.

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After you see your patient initially you'll bring them back for a follow up. When you schedule the follow up depends on if it's a cycling women, because hormonal modulation is depends on that fact. You may see them in 3 weeks, 6 and may be 8. When you are starting out in Hormone Therapy begin by scheduling a follow up for each patient in 90 days because it normally takes 90 days for a patient's hormones to rebalance themselves. That is the reason why people will come back in a short period of time. It's also about the ratio between hormones. And that is the other reason why people will come back in a short period.

One thing is I would love to have you do is not to try to fix everything at the same time. The patient will be very confused and their body will not tolerate it. So, spread it out. If you find that a patient's adrenal glands are not functioning as they supposed to – you cannot give thyroid hormones at the same time, because if you do-you can make the patient sick. You have to fix the adrenals first, then go back and maybe in 6 or 8 weeks later give them medication or other treatment recommendation for thyroid.

You are fortunate in that you have so much to offer your patients. The biggest way to get patients involved- is by word of mouth- if the patient is happy with you he will tell everyone.

Longevity Medicine - is the real future of medicine and you are fortunate to be here.

And the more you learn the more successful you'll be.

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How can you begin Longevity medicine with your patients as quickly as possible? The place to begin is by educating your patients on what could happen if they don't begin a Longevity Program. If they have never heard about Longevity Medicine it will be very difficult to explain the various aspects of Longevity Medicine and the benefits of prevention. This is especially important as patients will be required to pay for your services out of their pockets without support from health insurance. If you don't perform this step properly, you may be confronted with patients who believe that you are performing these services simply to increase your income.

A simple step that works almost 100% of the time is to give your patients easy-to-read books on Longevity Medicine. On this slide you'll see the list of my favorite books. I recommend that you create a small lending library to educate your patients. Have a conversation with your patient about Longevity Medicine, offer him a book on the subject along with a self-test questionnaire (Form 106). Share some interesting facts about Longevity Medicine with your patients, such as that the largest concentration of Longevity Medicine doctors is in Hollywood. People in show business know how important it is to stay young as long as possible. Show business is a highly competitive business, and the winners are often those who look younger than their peers. People in show business know that plastic surgery and aesthetic medicine alone are not enough to achieve the results they desire without adding Longevity Medicine. This is why many "A" list stars are the patients of Longevity Medicine doctors. For female patients, I especially like the books by Suzanne Somers: "Breakthrough" and "Sexy Forever". Dr. Jeffrey Dach's "Natural Medicine 101" provides a great explanation of the differences between conventional and Longevity Medicine. "Adrenal Fatigue" by Dr. James Wilson is the perfect guide to understanding what stress is and how to recover from it. For additional support, encourage your patients to share this information with their family members.

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Thank you all for your attention, I welcome you to begin the Longevity webinar series right now, right here.

- Don't wait for something big to occur. Start where you are, with what you have, and it will always lead you into something greater.