

DR. KEESHA EWERS: Welcome back to the Women's Vitality Summit: Caring For Yourself, Body and Soul. This is your host, Dr. Keesha, and my interview today is with Wellness Whiz, Jack Tipps, who has dedicated his career to advancing the application of natural health practices and bringing to bear the latest research in his own clinic as well as passing on his vast knowledge to others. His teaching style has been honed to cut through the scientific chatter to the true essence of the latest natural health research. You'll walk away from his seminars his books, and his personal consultations with valuable techniques, that you can immediately apply to your own practice of life. As a natural health practitioner, wellness whiz tips have touched the lives of thousands of people with his keen insights and foundational beliefs that he stands in service to the body's innate vitality, from which optimal health originates. So welcome to the Women's Vitality Summit, Jack. It's such a pleasure to have you.

JACK TIPPS: Well thank you so much, Keesha. It's always an honor and a pleasure to not only visit with you, but also how great it is to get to visit with some of the people whose lives you're touching with this kind of powerful and life changing information. So thank you so very much.

DR. KEESHA: Well I always start these interviews with the word "Vitality", and vitality is this power that gives us our lives and it's the vim and he vigor and the passion and the fire and the drive. And so often, I'm sure you see this too, I see women coming into my practice who are really lacking vitality, which is the reason that I decided to have this summit, because I think it's a pervasive problem for women around the world, not just in our country. So I'd like to ask you Jack, what do you see as the biggest vitality sucker out there in the people that you're working with?

JACK TIPPS: Okay. The vitality issue I think is going to be fundamental to all health and I'll also preface by saying I think that even women, more than men will have an impact on their vitality. It seems like the female vitality that the... in the Chinese system the "inner key" if it's the piranha that is the energetic force and if you take it to a molecular level it's the Adenosine Triphosphate, it's the ATP, the mitochondria generate that give us this electrical Ohms and charges in our body. And this is what we need. And so the reason I'm saying women are more sensitive to this, I think in the big picture, particularly in the reproductive cycle. Women are giving part of their vitality to their offspring. So nature has a system where the innate female vitality is actually shared and given or imparted to the child. And so I think women are just a little more the bellwethers... they're a little more sensitive. And that means their bodies may make decisions to turn down the fundamental energy this could be called. In one case it might be called "hypothyroid-ism". An endocrine imbalance.

But there's things within the body that cause this to happen, but you're saying "What are the top causes of these?" and there are so many right now in the 21st century right now, and one of the big ones is the toxicity of the environment and how things such as estrogenic mimics and things like this are in the foods and the plastics and so forth and so the bodies that are sensitive start recognizing that they need to turn down the energy a little for self preservation. So often a lack

of vitality is coming because of a choice of the body and so this is where I think we find that in the 21st century, that the female body might be struggling to maintain glutathione. It might be struggling to maintain the neurological connections, might be struggling in the glucose metabolic system that makes energy. Because each person is biochemically innate, while we might have a stall or a collection of fiber-6 energy stealers, the one that's predominant for an individual is most likely going to come from their individual lives, their body, mind, spirit.

Trying to adapt and survive the life in the 21st century, so there's a little bit of an indication that we really look at customizing and trying to understand the individual first and so when Dr. Roger Williams gave us the rules of Biochemical individuality 75 years ago. This is where we say, "Well, you know there's probably 10 top causes of discomfort that can come on the vitality." And this is going to turn into physical and mental symptoms so if we're looking really at the female body we find things like relative-dominant estrogen will then start to set off a cascade. There's an imbalance in hormones, an imbalance in the energy system.

DR. KEESHA: But I'm going to stop you there Jack because...

JACK TIPPS: Oh thank you... thank you... [Laughs] That was going...

DR. KEESHA: I want to circle back to the term "estrogen-dominance" and define it for listeners who haven't ever heard that term. And also "estrogen-mimicry" in the environment. I think both of these are very important, but what you're boiling down to is this hormone imbalance that can happen in women for a variety of different unique and individualized ways. But there are some common things in our environment that are triggering women's genetics and their gut and all the different hormone metabolizers in their bodies. So let's start with what estrogen-mimickers are and what estrogen-dominants are and the damage it does to female vitality.

JACK TIPPS: Well surely and it'll be a good little preface to mention that some of these estrogen dominants and estrogen mimickers will directly impact you in the gut. Microbiome, which I think is where we have a primary cause where there will be altered or inflammatory signals pushed into the body because of the stress of the bacteria, in what's called the microbiome. But let's go back to relative estrogen-dominants. So we should understand that in ebb and flow, whether it's in lunar cycle that women are attuned to. The menstrual cycle that the woman's body is cyclical and the body expects to have ebb and flow, just toss around and of course, estrogen. And so when someone becomes estrogen dominant, that means when the body might be shifting and estrogen is to draw and maybe there's more influence cellularly by progesterone, the estrogen stays higher even though it drops, the progesterone can drop.

When you look at a blood lab report that's done over a month's or a year's analysis that done repeatedly. You can end up with cycles and you realize that no matter what happens, at the time of the month, that progesterone should be rising up, that the estrogen is still saying in an elevated or dominant position. That the estrogen receptors on the cells are retaining too much activity and

so this is, we just call it a hormonal imbalance, but there's certain symptoms that are associated with estrogen dominants, one being PMS, the creation of fibrocystic breasts, fibrocystic tumors, enlarged endometrial lining, they'll call it endometriosis. This is coming from the over-activity of estrogen. So when we shift over from estrogen mimics... it's unfortunate but in our society now we have chemicals that will serve, or attach, to the cell, membranes and function, or tie up and estrogen receptor. They may even start an estrogen cascade into the cell so that if it's progesterone's "time of the month", but there's a bisphenol A, because someone has been drinking out of a plastic bottle, or a can liner that they're opening up the can of green beans and getting the bisphenol A. Or they're drinking tap water where a lot of estrogenic compounds have gone back into the water supply and they're not being filtered out through normal tap water filtration, meaning the municipal water. Meaning the woman is receiving things that are tricking the body. They're mimicking estrogen that holds them in estrogen dominants because they're getting another influence that's tying up receptors.

So the real job of their own genuine estrogen is now unable to dock to the cells as much and it's floating around in the bloodstream telling the pituitary "Hey there's plenty of estrogen" So that's the situation when we identify things particularly plaques, so there's 20 or 30 things that are toxins from the pesticides and so forth. That can mimic estrogen and impact the female body. Once this is out of balance like that or the other aspect, that's set up for eating these things. They impact the gut microbiome. The appliances really found out are all these macrobiotics... mostly we just call them bacterium. We can simplify it and just say "bugs". And the G.I. tract, they are re-conjugators of estrogen there's certain species that re-conjugate estrogen it might be in some genotypes, and some people, that it's up to 30%. And so when the estrogen is disturbing those guys, the bugs, mimics, they're not doing their job and so a person goes estrogen dominant.

And the dangerous thing about this phenomenon is that if it's the type of estrogen that is running dominant. It's what is just generally called a "toxic form" of estrogen. It was something that the liver was supposed to break down and something the gut microbiome was supposed to break down. And it doesn't happen. And this perpetual estrogenic presence can stimulate cells, particularly were their [inaudible 11:53] so they had in the breast area, the uterus that it will stimulate the cells to be hyperactive, active too long and this is a foundational imbalance that can lead to cancers. So that's the importance of why people need to avoid the bisphenol A, and be looking at the clean diet, the organic and so forth, so that they're not getting these compounds into their bodies.

DR. KEESHA: Now if our listeners aren't understanding bisphenol A you usually hear it called "BPA", so BPA free plastic, those kinds of things you'll see it marketed because it's such an important chemical to stay away from. Now one of the things I want to circle back on, Jack is this really... it's such clear science that when this is happening, what you just described, it puts women at risk for all the reproductive cancers. Anything that's estrogen receptive. And as you noted, and I want to make sure that we say this really clearly: Depending on your genetics and

how well you metabolize estrogen and the metabolites of estrogen is your risk for this. And I just want to tell a quick little story.

My family has a lot of breast cancer and I've already had it once and treated it, within a month it was gone just doing natural things. That was a warning show across my bowel that said "Hmm... I should probably look at my genetics" and I'm not just talking about the bracket gene, which is only 10% of inherited. Breast cancer, I'm talking about 23andme panel which is what I did, as well as a brevagen. And when I looked at those, I said "Oh my word, I have never seen anybody who's a worst estrogen metabolizer than myself. Out of all my patients that I have been working with over the 4 years prior on genetics, I've never seen anyone who's done a worse job as far as their DNA is wired to. So then I did a urine test to see how I am actually doing in real time. Not just what my DNA says, but what I'm actually doing. Metabolizing my estrogen and all of the little metabolites that go with it. And I had never seen a worse urine test. So I called up the lab to talk to the M.D. and said "I just want to go through this with you to see what I'm missing... in my own protocols that I have myself on. And also to see... I've never seen a worse test than mine. The woman on the other end says: I haven't either.

So this is a really interesting thing for women to understand that there is unique individuality in each one of us. And that doesn't mean that I have to walk around afraid of breast cancer. What it means is I'm armed with this knowledge that my body just doesn't do a great job at this. So I have to help it. I have to do everything that I can, that I know about, that's within my power, to be able to help it through. Then, let it go. And that's the way it's been for the last 10 years and I haven't had a blip. I just think this is such an important conversation, Jack, because women out there become afraid of breast cancer and of course that's a self-fulfilling prophecy, because fear itself winds all of the system up and creates the problem.

JACK TIPPS: Absolutely it does. What do you fear is upon you? Do you see... from the book of Job and it's really the law of attraction, if you're attracted to something you attract it to you. And people, our understanding is we have this blessing today of the genetic testing. We have a blessing of being able to take a swab of urine and look at these estrogen metabolites and see if someone is very high in the toxic form, that makes them a primary candidate, but this is also so empowering because there are nutrition and there's botanical elements that can come to bear and you can actually look at the lab work and look at your improvement and a person that's very prone to having this type of estrogen dominance, it doesn't take that long to say... clean up the act and get their risk factor to dramatically drop.

And what they're not being told, if we want to go the celebrity route. Many people were aware that Angelina Jolie got afraid when she found she got the BRCA gene, so she voluntarily did a mastectomy so the offending tissue would be removed. But this is not what epigenetics is telling us to do. That's what genetics say, "Unfortunately dear woman, you might be a bigger candidate. You need to take special effort with cleansing with vitamins and minerals, with herbs, the medicines of the body. You need to take special precautions to make sure you stay in the safe

range. And you're going to work harder in the hormonal area where someone else may be working... need to work harder in the liver area because they're poor or something like that. But epigenetics teaches us; we do not have to activate those genes. We do not have to go down that road, which may be the path of least resistance if we continue to do things wrong. The weakest link is going to click into place someday and let's say a breast or uterine cancer. But when she claimed the power that your body is made to adapt and to survive.

And although we all have a struggle somewhere in our health. Very few people can stand up and say, "I'm the renaissance, perfect Leonardo Da Vinci." We all have little flaws and nips in our genes but epigenetics is meaning that our cells can alter their metabolism without having to alter their nuclear genetic structure. And so it's a matter of all the books are in the library, the diseases and the cures are all in our library. But we're going to go in, we're going to have a choice about which book we check out and read. That's the way the cell is. We have a choice about what we're going to manifest and that's called "epigenetics" So there's a factor the body responds to. One of the big factors can be in the body, mind, spirit, model of holistic medicine. They mind, if you're thinking that you have a fear than you can literally start to alter epigenetic responses and that's in the wrong direction.

If you claim that you don't have that fear and all you need is some knowledge, and let's talk "Now" let's make this empowering, you do not have to live out what your genes are set. You live out what your epigenetics can do. Then we find that the botanical medicines, the herbs, the Ayurveda herbs, the Chinese herbs, the Native American herbs, they all have these factors to help the body balance these hormones. And that's what you see when you do the lab work. You'll see the "before" and "after". And let me tell you it's a beautiful thing to see the power of epigenetics because the thing that the cells are responding to is nutrients, that's how the body was set up. And so when you do the wrong things like that you can completely know heads your bat, and say "OK, I'm so blessed to know the proclivities of the genes that I inherited, but now because of science, like a 23 and meet test or a Dutch lab test that are digging into these areas. You'll get the power to know what to do then you'll take it from your mind that you're supporting your body the best you can.

DR. KEESHA: Now I want to take this into the realm that is so exciting and that is "Who affects our genetic expression the most in the body? Carries 90% of our genes? The little bugs that live in our gut?" So let's talk about how that affects our estrogen and therefore your vitality. `

JACK TIPPS: The latest research now is literally, we always see this as something mind-blowing but literally the research on the microbiome, which means all the microscopic life forms that are on the human body. Science is literally having to re-write the books today based on the discoveries of science and our alliance with these microbes and when you say 90% DNA that is actually human is in the gut there. We're humbled a little bit, and we have to realize that we are in a very tight relationship with these microbes so suddenly we find from science that bacteria can live from 60,000 feet. Bacteria can grow inside a nuclear reactor. Bacteria can live 2 miles



under the surface of the earth. They can live on the top of the tallest mountain, the depth of the ocean. They are all pervasive and major survivors. And science is learning now that some of the "bad guys" are actually good guys in certain contexts... they're not all bad, they're not all good.

Some of the good bacteria, if they're mistreated by the perpetual onslaught of antibiotics in commercial meat start to turn. And they're being threatened that they're getting more and more viral. They are selected. We talk about natural selection. They are involved in that and they select to become more violent because they have to live in a tougher world. So as we train our bacteria by the overuse of sugar, by the use of antibiotics, let's say the overuse of antibiotics. Certainly we save a life with the antibiotics, but if we do the things that we're doing today and the toxicity that we're altering our bacteria and then when they become a little nastier to us, they're raising inflammation.

So there's science now that explains the gut bacteria helps set what's called the 'set point' of inflammation. Now in 2004 TIME Magazine put it right on the cover for us "Inflammation: The Silent Killer". Maybe it was The Secret Killer... sorry if I gave the wrong name. But either way they're saying the same thing. In 2004 humanity got the message that inflammation is driving hormonal disease. INFLAMMATION is driving Alzheimer's, Chromes Disease... So it's behind all this and this type of inflammation is not "tennis elbow". It's a silent inflammation that can be in the brain. You don't know it. It's a silent inflammation on the cell membranes, which is what's called the "Plasma" membrane that surrounds the cell. The mitochondrial membrane that makes energy.

See we're now back to vitality. That if a mitochondrial membrane is having silent inflammation, it's not allowing glucose and oxygen to do their job right and make our vitality. And then we start seeing the fatigue. But these directives come from the bacteria, so science made this absolutely astounding discovery that the energy of the vitality, organelles in our cells, called mitochondria contain bacterial DNA. Our energy power plants in our body are not our human DNA. They are bacterial and the bacteria in the gut, talk directly to the brain, the cells. To our immune system. And suddenly if someone has that big of a voice, when Columbus was trying to discover the New World he was trying to talk to King Ferdinand but it was Queen Isabella that made it happen. The same concept now that it's bacteria, that have such a massive [inaudible 25:20] and they're supposed to be our allies. So the word genome, now, the scientists have decided that human beings are no longer just the DNA that was sequenced from a global genome study. That we have to include all the microorganisms, the fungus, the bacteria, the viruses, microplasm, everything that's in and on the human body is now considered human. It's now considered the DNA of what it is.

So science has already made it real clear. You're not who you think you are. You're also your bacteria and this might mean that we need to be paying attention to the fact that when we eat, we're eating for our gut bacteria. Because they will synthesize our food, the way it does in nature and the plants. The bacterian fungi. Synthesize the minerals in the soil for the plant. And without

the microorganisms the plant dies. Same thing with the human being. Without our microorganisms, we wouldn't not trans-mutate the earth element into cells by eating food, nourishing the bacteria, and the bacteria give us vitamins, they give us minerals, they give us fatty acids and they give us the signals that operate our cellular metabolism so they are the intermediary between our food and the health of ourselves. When our bacteria become unhappy, they do this by eating too much sugar. They can do this by eating any condomonite diet that is too extreme. Because we change and select differently in the tummy according to what we eat. Science is proven, especially with some of that earlier research with Bruce Lifton. We see that the organisms within us will have to change and adapt to our thoughts. And our feelings.

So when a woman is under stress, the adrenal glands turn on. There's extra adrenaline, additional cortisol. The bacteria in the gut literally read that and behave differently. They are now sympathetic that that person's body is under stress. And so they select differently, meaning they mutate. They change their biodiversity and start producing different compounds because of that. So this is why our holistic model is so vitally important. That in today's society I'd say we all need to relax and I am speaking to the guy in the mirror, when I'm saying this. The female body, it's critically important to have the time of meditation, contemplation, relaxation, and spa days... Because you're not just tampering, as people talk about it. We're having to comb down the stress response in our guts that drive the bacteria to changes that become more inflammatory. The inflammation activities in the body then set up a situation where the hormones don't work right and suddenly the ovaries are not producing right. And the tissues start changing. And if the hormones get out of balance, then we already know from the last 100 years of medical science that there's key changes in the body when the hormones don't work right, whether it's adrenal or pituitary, or the ovarian, yes.

DR. KEESHA: Well let's pause for just a second and come back to the idea that your thoughts and your feelings actually influence these bugs because I don't think people really understand that very well and I think science has been trying to explain it but we have an interview with Ajayan Borys where he does a little 15 minute meditation right in the middle of his interview, that people can follow along with and see just how easy it is to bring yourself into a quiet center just a few minutes every day and it allows your microbiome to take a breath and to decide what to do next. Because our impulses are telling them what to do and they are, in turn, telling other parts of our body what to do and it's a system and it works together so you've got to get in and break that cycle of stress at some point. Just 15 minutes of meditation. Make sure that you listen to Boris' talk because that one has a great meditation on it and that's one of his bonus gifts too. I also want to come back to something else you said Jack. You were talking about a mono diet. In our time of frenetic running everywhere madly, people will read in magazines or hear from their healthcare providers "This is a superfood, this is a good food, this is a food that is an antioxidant" and say, "Ok, I'm going to make sure I eat blueberries everyday".

So what you were telling us about rotation is shown to us in farming practices. The most nutrient-dense soil with the most diverse bugs that are helping the plan do its thing is farms that

actually rotate their crops. Crop rotation has been known since ancient time. When I take groups to Peru every year we talk about how the Incas did this in these wonderful terraced mountains. They rotated their crops. They knew about the generativity and the help and the biodiversity of the bugs and the microorganisms are so necessary. In some way they knew about this. So this is the same thing. Be a crop rotator in your body. I want you do give some tips to women now about how they can nourish and strengthen their gut microbiome because one thing we haven't mentioned is that there are 3-5 of your pounds of your body weight are made of these bugs, and they're microscopic, which means that there are a lot of them. And you know, we can say for every cell that you have that makes up your structure, you've got 10 bugs to match it. They outnumber us 10-1, which means we're not hosting them, they're hosting us, right?

JACK TIPPS: Yes, it may humble us a little bit to realize we're not pulling all the strings. I try to think "how did we gain the upper hand on this and have mobile bodies?" and tell it to scientists, we've got larger brains and opposable thumbs and we got the integrity set up between the blood-brain barrier. Blood placenta barrier. And we have these barriers and we said to the covenant was reached. But the microbial kingdom, as we come into their kingdom and ask permission to live here that we had to set up barriers in immunological conditions that they need to stay in the gut. The gut bacterium gets in the body and creates infection and can kill people, so we have this barrier. That barrier get broken it's called "leaky gas".

Then we know we have a whole host of problems that come from that because it's challenging our survival. Just backtracking a second, on a multitasking day I wanted to go ahead and move toward could we ask your listeners if they're not having a meditation or a yoga time where they can live in the fullness of being a woman. People need to understand that to be a full woman you've got to have time of meditation. This is because the battling of all the dragons is a male aspect, like saint George going after the dragons. So for many women today, they're trying to make a living, trying to raise kids, trying to have a relationship with a husband, trying to drive in traffic and they take on more and more and more because of their nurturing hearts. If you don't let their innate vibrational rate slow down, let the healing hormones have a few minutes. Be able to cultivate some restful sleep in the evening then they've been drug out of their femininity and into the whirring of the male dominance aspects of culture, and their outside men in their element and that starts to take more and more stress.

So if there was one good thing coming right now from our visit, it's that there's a woman listening and she is not making time in her life. That would be pretty darn near top priorities! As we go from there then we're able to look at this concept of biodiversity. And so when we see this in agriculture that the cows should eat in different pastures the chickens should follow the cows and scratch in the manure and work it into the soil. And other animals can clean up, these animals can move, the chicken house can move on the farm and the chickens all know where to come back to. The cows know they can follow the tractor to new pasturage, where there's new herbs and things in the ground that are growing in different geographic routes so that even a small farm. And so nature does teach biodiversity, we can just say the general observation is



there are no giant fields of one plant anywhere in nature, because they're in symbiosis. I've got a mother ward herb growing in my garden and an asparagus growing right through the middle of it and their roots are entwined and I can't separate them. They're both having great vitality and somewhere they formed a great symbiotic relationship that I have and they're happy plants but again nature speaks to us for biodiversity.

The cafo is a confined feeding lot for chickens, goods, and cows and so forth is fundamentally now being looked at as an abomination to nature, that we've stepped outside of nature thinking that we can prank in these animals and crank out the product. And a sterile antibiotic laden environment. And because the demand for food is very fortunate that science has turned out discovering that biodiversity yields more food for humanity per acre than a cafo type top operation. And so we learn some lessons in agriculture. Let me tell you it's a microcosm and a macrocosm. Nature applies directly to us. So we're born as human beings, we for birth, the vaginal microbiome changes dramatically and it literally prepares the species that are going to inhabit the baby's eyes and nose and mouth and skin and GI track. And those are vaginal area. More and more with medicine allowing the optional cesarean... when that child comes out, you're getting a skin microbiome to touch them. And so we have to look at nature and say, "What was nature's plan?"

Nature's plan was for certain species to feed the infant. And that infant then from the breast milk, will get the [inaudible 38:19] going. There's bacteria in the milk, bacteria on the breasts that are all for the infant's survival. When we either fail to set that up there can be a handicap. When we do things like a monodiet or overtaking of antibiotics, we start killing these species. Let's say, Keesha, your genetics would want 600 species, and they're different species in the gut. When you have those 600 species, the brain is working right. What they're calling ph1, ph2 immunity, gets its balance, acquired immunity. They get their balance so you don't run inflammatory diseases. And so this is all based on the brain and the body. Knowing that in their constituency of bacteria, there's about 600 species and they're all providing little bits of DMA, of etaboiltes, that trigger that genetic reaction in the cells. And they're providing the food like Vitamin K, B vitamins are being made and all of a sudden they're saying, "look at me, I've got a workable system, I'm making Niacin vitamins, minerals, I've got inflammation worked out. I'm now ready to be a superwoman and I can live in the natural environment of earth."

With the ear issue, which 90% of ear infections are viral, yet nearly 95% of all ear infections are treated with antibiotics. So there are many people not getting the necessary antibiotics and lets say that antibiotic [inaudible 40:11] and some of those little vulnerable species that the mother gave one person, that working for their genetics. It gets knocked out. Another species takes over, now there's... to fill those niches... now there's more influence from that species and then another antibiotic is given, and that species may go a little more rouge. It may go a little more "this is a hostile environment, I'm going more intense, and I'm going to share my DNA, my antibiotic-resistant DNA. I'm going to throw some punches back at the world and those bacteria start taking over and then maybe there's another antibiotic that comes along and now you're running on only

500 of the species you should've. And the ones you have now have made mutations, not in your favor. It made mutations in favor of their survival. In a hostile world.

Now let's say you embrace the modern diet. I mean it is ubiquitous, everywhere. You tell someone not to eat a burger or bread, that person most of the time is absolutely miserable. Because it's reinforced on television, billboards. It's convenient, it's inexpensive. It's the way this world works. But now when you start getting the additional sugars and the lack of fibers, now the gut microbiome selects toward more violent species. And then other things come along; let's say a person is stressed. Let's say a person takes another type of medication. So this altering of the microbiome and then all of a sudden a person finds their hormones aren't working right because the bacterial species that work with estrogen or the progesterone's are no longer present... no longer interested in performing that role. So this is where the inflammation in the GI tract and the sifting of the microbiotics start setting the stage. So what we're really saying here, Keesha, is that the gut microbiome is fundamental for people who have female hormone issues, such as PMS or difficult menopause. One of the first areas to go to is the gut. And this becomes more and more profound, the more we learn. Because the gut...

DR. KEESHA: This is the same for not just those two things you mentioned, but also your mood, your fertility status. All of these things are really all about the gut. And it's integration into your whole being. So I just want people to understand the phenomenal, fundamental, foundational importance of what you're talking about right now

JACK TIPPS: Well we need to get back to causes. Because this story sets the stage for hypothyroid. And so now a person starts taking a nature thyroid, and that is sort of coaxing the cells to take [inaudible 43:32] the body can flip it around and get some T4 activity, which has to convert to T3. And then we look and say "Are you on the right dose?" but all of that operation doesn't do one thing but [inaudible 43:46] which is the cause. And so this is one of the reasons why people are taking a lot of thyroid medications but not getting well, better. Maybe they'll bolster some energy that processes temporarily. But it's in no way an answer in hyper-thyroidism and that taste wasn't... you might say.. the cause. So we do have a domino effect of these things cascading as one thing goes wrong, then it starts wreaking havoc and another system and it just depends on the person. Which thing bothers them the most. But they might try to treat or suppress and all the while I'm not getting back to the cause... vitality. One of the things this gut microbiome loves is glutathione, it's a cellular anti oxidine. It has to be made and from that perspective, it's a little more difficult.

You can buy products and take it and then end up hoping that it gets your assimilation but they love it. So what we find in the female cycle is that glutathione is one of the gigantic causes of imbalanced hormones. The body in caring for childbirth. It stores the glutathione, it takes it from the brain, the heart, the kidney and it stores, stores, stores after ovulation. And if there's a lack of fertilization, the body goes "ok I don't need it. I don't need this antioxidant for all the activities of new life and pregnancy." Then dumps it back. But there's a relative of glutathione, in many

people today, and this ties directly into it. We know that there are a large number of people now who find some difficulty with the medication process, which is just the cellular metabolic process of adding a certain molecule to something else so it can function. So there's this whole doping of C and H to these atoms, if it doesn't happen then you don't express your genetics right. I don't think we want to do too much in that and there's so much in the media now on this. We have to realize that bacteria are also a methylator. In fact what they do, they're the 30% on the [inaudible 46:35] and they methylate it. And they convert it. It's called constigation.

So this becomes a big factor that a lot of women have not addressed yet because this is a new science. We're looking at this glutathione being available so the thyroid can make the thyroid hormone safely. So the cells can use the free radicals, which in nature's plans are beneficial, these are horrible cancer-causing free radicals, but the body has to use them and they do some good things. #1 they make a TP of the energy of life. #2 they elicit the cell's protective mechanism to protect it from the impact of free radicals! So a little bit of free radical activity is absolutely necessary. But when you have too much, then we have mitochondria that get destroyed, or altered or damaged and then we're right back to the vitality issue. So glutathione starts to play a very important role in female hormone cycle, because it's integrated, it's used, and it's a huge molecule that the body is shifting for a woman, it's different with men, but with women the preparation of the body is to support new life and the perpetuation of our species. And so there's this huge tidal wave every month of accumulating glutathione for use right there at the ovary, right there at the uterus. It's critically important to the fallopian. It saves it up and if the child is not there, there's no the fertilization, it'll say "Okay I'll let it go", it stores it again, it lets it go.

When a woman is in a glutathione imbalance this is where the hormones really start causing problems, inflammation comes up and we have this cascade of metabolic distress and it's going to show up as some kind of vulvarian, adrenal, or liver dysfunction. Inflammation and so forth. So this is one of the big new things in the past couple of years, it's really coming into practice now. If a woman has issues with depleted glutathione, this alone is impacting fluid distribution, so these are the people that have a lot of swelling, energy production, these are women that start to have fatigue. Intracellular hormone construction, ovulation, the pelicular phase. There will be something thrown out in those menstrual phases. Then the symptoms come. So then the woman is more sensitive and now is... just not having the core vitality that's needed to experience all the wonders of life.

DR. KEESHA: Now historically if a woman goes onto the internet and looks up "glutathione" there's going to be all kinds of controversy over how readily it's absorbed, the way that it should be taken. I know that back when I started into functional medicine many years ago we were giving the precursors that make up glutathione intravenously. Or giving glutathione intravenously for people that had Alzheimer's, Parkinson's. Now more and more science emerge to show us that "We've figured out ways to sustain glutathione a little better in the body" So why don't you speak to that as a round-up because we're 10 minutes into the end of our talk here!

JACK TIPPS: The word "round-up" sure [inaudible 50:48] but pesticide is a total disruptor of a gut microbiome to the pathway. People that are eating genetically modified corn and soybeans are giving it to their kids. Soy formula, powders. It's a big wake up call; we must go to the organic.

DR. KEESHA: And the EUROPEAN UNION has BANNED it just RECENTLY! So sad about the United States just letting Monsanto wreak havoc in our country.

JACK TIPPS: Okay lets go back to the round-up point, pose the question and I'll see if I can...

DR. KEESHA: We used the words "wrap-up" [Laugh] So to "wrap this up", instead of "round this up" I would love to have you speak to the issue of glutathione and how to take it, how absorb-able, how long it stays in the body and it's functionality. Because when women hear this talk and go on the Internet they're going to find all kinds of information that's conflicting.

JACK TIPPS: Alright, the history, this is the molecule that's made in the body. It's made out of 3 Amino Acids; Amecytle-15 can be one, glutamate acid, what's the 3rd?

DR. KEESHA: ALA, NAC are some of the precursors

JACK TIPPS: These are the ways that you reach for it. And we had the idea that if you took glutathione as a molecule, you are not going to have uptake. As science unfolded on this face down, if you take glutathione orally, it's really some of the gut bacteria that are gobbling it up and they're not sharing it. Because it's so precious to them. And for their lives. And so the practice was to give people the I-V-E's. Then they found the glutathione put in the IVE was not giving uptake that it was having. It was being broken down in the bloodstream. It might be the blood and the lining of the vessels want that thione too so glutathione is a hot ticket, and everybody's looking for it. And going to use it. More recent research has shown that lytosudo-glytohyone delivery system and acetyl-glutathione have some reasonable uptake and I had not seen the report but I've been told my a scientist that even now they're finding cases where oral glutathione is being uptake but we just have to realize it's fairly expensive and there's a lot of uses for it.

So the best approach is to use the precursor amino acids and go ahead and take some glutathione, whichever you prefer. It means this has already been reduced and it's more ready. And now they do show there is cellular uptake of at least a small portion of what a person would take. So we have to go somewhere so either we look at foods, which are boosting glutathione, or we're looking at a supplement or we put the two together and [inaudible 54:29] glutathione might seem a more epigenetic way. So there are companies that make products that try to combine these factors so that we have a legitimate help for people, because I'll tell you the woman is suffering from PMS. Probably the #1 thing to do is to gut microbiome that they need to build the terrain and the lesson in the gut real quick is that it's not so much

about taking probiotics that you need anyways, they're just good guys. But they're not yours so they may not deliver what you would hope but you build the terrain and this is where I'm starting to see now after maybe 10 years of this... probiotic phase of research and understanding. If you build it they will come. And so even if you've had some destroyed species, how are you going to build your terrain so that you can attract? In the backyard I plant certain plants depending who I want to attract. We can put things out and attract what we want. In this case, with the fibers, it's the prebiotics that are so critically important that the fibers, or feedings, [inaudible 55:56] If you keep a constant... lets say a fiber or whatever your foods and vegetables. Fibers going through. They start to teach the bacteria that are already in the gut to adapt to change and hopefully it's changed back to a less violent species. And they'll say, "Hey this is the land of milk and honey. I don't have a lot of threats here. I'm going to munch. I'm going to reproduce and proliferate." Everybody's happy.

And so then as we go around through life as we bring more fibers in, more prebiotics. We kiss someone; we get an oral microbiome from them. We're going to get exposure to other bacterial species. Better either friendly or not to human beings. So literally if you build it, they will come and the key builders are your berries. Strawberries have a marvelous fiber in them and so we can go right back. It's all fruit and vegetables that present the body, what it needs, and so this is where we go back to nearly every diet book out there except maybe a sever Cheetoh adaption. They're always talking about "Eat Your Vegetables" [Laughs]. That's a huge factor, not to be thinking whether I like or dislike a vegetable but look at the fibers, pre-biotics that I'm getting so that I have my gut microbiome select for more of the estrogen big conjugators, to select for the anti-inflammatory modes. Of the bacteria. So that's the huge thing there that we're going to see. In the meantime while science is just now starting to come to the realization it's all about the prebiotics, we can start now by finding fibers, vegetables that work for us. And since someone probably has the SIBO, I'll just say that needs to be reconciled.

They have good species living where they do not... belong so it's a new topic... of disassociation [inaudible 58:50] Those people have a prerequisite work, but the goal is not just having a tummy that doesn't bloat and have pain. The goal is how can you be eating 3 or 4 times more fiber and being encouraging these species. The second way to do this sort of terror formation and this debt to reclaim the soil from which our hell springs would be using some of the ferments so they will be working with different ferments, according to which they can tolerate [inaudible 59:26] Things that need to be corrected, not adapted to. If a person is having histology reactions they need to be corrected and they have a methylation issue.

DR. KEESHA: Jack, we're going to stop, we're out of time. This has been so amazing bunch of information and I'm just so grateful you came on to share your wisdom. And as always, you are a well of wisdom and we can put a quarter in you and you can go for weeks and I just love that.

JACK TIPPS: Well, Keesha, thank you so so much. Hopefully there are a few takeaways, eat your vegetables, look at glutacyone, work on the microbiome and you'll find that the female



hormone system starts doing so much better and I'm sure as a practitioner you work with some adaptagenic mechanicals as well. And those can be so very helpful for people and now you've got... it's interesting how all of the tools that we need are coming from nature, they're coming from foods, and natural substances. Our bodies are craving and trying to live without and when we start giving these things to our bodies our health shifts towards an optimal health and greater vitality.

DR. KEESHA: I couldn't agree with you more. And then on drkeesha.com [inaudible 1:01:01] along with the precursors and that supplement because sometimes because of the environment we live in which is just what you started this whole talk about, makes it so that we have to take some things from outside of our diet because we live in an environment that's draining it too quickly. I appreciate the full circle that you provided here and you have a bonus! About how to strengthen the microbiome, how to take care of it and how to protect it and we'll have that on your speakers part of your page as well as your contact information for people want to go onto a very amazing website for the wellness wiz tips and all of the ebooks and the books that you've written and they could spend years on your website and keep learning so I appreciate the resource that you are for everybody for healing themselves.

JACK TIPPS: Thank you so much and all best wishes to everyone you're working with.

DR. KEESHA: Remember everyone to live, love, learn and laugh and have a fantastic day and be your most fabulous self. Until next time.