Natural Approaches to Mood
Guest: Dr. Peter Bongiorno

The contents of this presentation are for informational purposes only and are not intended to be a substitute for professional medical advice, diagnosis, or treatment. This presentation does not provide medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition.

Dr. Mark Menolascino: Welcome to the Women's Heart Health Summit. I'm your host, Dr. Mark Menolascino, Medical Director of the Meno Clinic Center for Foundational Medicine in Jackson Hole, Wyoming. This is your chance to hear from the world's experts on women's heart health, optimal health, and how to achieve optimal vitality. We're here today with Dr. Peter Bongiorno, one of my good friends, one of the world's experts in lecturing to integrative and to functional medicine doctors. And Peter, thank you so much for being here today.

Dr. Peter Bongiorno: It's a pleasure to be here, Dr. Mark.

Dr. Mark Menolascino: Well Peter, let me tell our viewers a little bit about you. I've known you for several years. We met after one of your lectures. I came up to you and told you how much I liked it, how much learned. I read your book. I really think that you have a great way of communicating your knowledge in a passionate way to the viewers today, to your readers, and to your clients. So thank you again for being here.

So Dr. Peter Bongiorno is a naturopath and a licensed acupuncturist and Co-medical Director of The Inner Source Health, with two thriving practices in New York City as well as Huntington, New York. Peter trained at prestigious Bastyr University and researched at both Yale University and the National Institutes of Health before medical school. He is the author of several books as

well as a practitioner guide. And his latest book is just coming out for the public about the complete drug free program for putting anxiety behind you. So Peter, thank you so much for joining us today.

Dr. Peter Bongiorno: It's a pleasure to be here.

Dr. Mark Menolascino: One of the things I feel very fortunate to talk with you today is some of my best friends are naturopaths. And I think if I went back and got my training, I would like that. And a lot of people don't really understand what it takes to become a naturopath. Can you tell us a little bit about the journey as well as your experience at Yale and the National Institutes of Health?

Dr. Peter Bongiorno: Sure. Well we'll start with my experience. So basically when I graduated college, I thought I wanted to go to medical school. But there were things about medicine, I have to say, I didn't love. I had done some volunteering in hospitals and clinics. And even though I was very interested in medicine, I didn't love the whole environment, even though I didn't know why. So I did exactly what my immigrant Italian parents wanted me to do.

After I graduated college, instead of going to medical school, which is what I told them I would do, I decided to join a rock band. And they were really happy about that, yeah. And while I was doing that, I started doing research. And I started, actually, in Yale because I was in Connecticut. And from there my mentor at Yale brought me down to the National Institutes of Health. And I was still playing in a band at the time and doing research and learning.

And I'm thinking to myself well, maybe I'll do an MD/PhD. But I wasn't sure I wanted to be in the lab the whole time either, a lot of bench time. And after a while, sitting in the lab can get a little tiring too. And I was in my mid 20s, thinking about what I wanted to do with life. And I had a good friend who was diagnosed with multiple sclerosis.

And she, after going through conventional treatment, not finding a lot of help, she went to a naturopathic doctor, someone who did natural medicine, and got much better. And that was sort of my aha moment, when I saw her improve so much, because that was something I was very skeptical about. I didn't really believe in natural medicine. I had no interest in it. I was very science oriented. And I thought if it didn't make scientific sense it probably wasn't useful.

And that sort of changed my thinking because when I started looking into some of the recommendations, such as a low saturated fat diet, good quality vitamins, things like that, I actually found a lot of research that supported this. And he talked to her a lot about stress and how stress affects inflammation and all these things that were really very, very new concepts for me. And that's what made me decide to try naturopathic medicine because that made sense to me, and it got me really excited. And I wanted to learn more about it and use that to help people. And that's actually how I got interested in it.

And when I went to naturopathic school, even at the time I wasn't sure whether that was going to be a rigorous training. So I thought well, let me try it. Let me see what it's like. And sure enough, when I went there, what I found is that the training is very, very rigorous.

Actually the curriculum, in some ways, is very similar to what a medical doctor learns in terms of the same amount of things, like anatomy and biochemistry and pathology. We actually get more physiology. We get less of things like pharmacology. You don't really do hospital rotations. It's more primary care. But even the hours are very similar.

So what I learned is that really it's an equivalent education. It's not the same education, but it's equivalent. And besides learning what regular medical doctors learn, you also get a lot of holistic philosophy and holistic medicine. So you learn the philosophy of really looking for the underlying cause. And to do that, we also learn a lot of different ways to look into a person's factors that are concerning their health, so things like what are they eating, how are they sleeping, what are health stressors like, do they exercise, and then learning ways to adjust those for patients.

And then of course looking at things like vitamins and herbal medicines and all that, and learning how to put it together to create a plan that really works for a person, that works for their individualized schedule, that really works for their needs, because you could even have the same recommendations, but one will work for one person and won't work for the other if you're not really personalizing it for what they need specifically and for their schedule.

So that's really what naturopathic school is about. It's about this blend of conventional medicine and scientific rigor with more of a holistic philosophy of looking for the underlying cause and creating a plan that will fit to a person's needs.

Dr. Mark Menolascino: What led you into Chinese medicine and acupuncture, Peter?

Dr. Peter Bongiorno: Yeah, so that's interesting. So actually while I was in naturopathic school, my girlfriend at the time, who became my wife, was very interested in acupuncture. And to tell you the truth, I had gone into this natural medicine world a little bit reluctantly, right. And so Chinese medicine was still very…

Dr. Mark Menolascino: One more layer.

Dr. Peter Bongiorno: Yeah, way out there to me. But I actually started having some health problems and insomnia and a number of different issues while I was in school, and went for acupuncture and was really just amazed on how well it worked. I just saw it help immediately, even though I didn't understand why.

And honestly I'm not sure I still understand why. But I do see patients do so well with acupuncture. So I decided I needed to learn it for myself. And that's how I got involved with it. And I tell you, I'm really glad, because while I'm working on patients using naturopathic therapies, I find the acupuncture just helps people start feeling better almost immediately. What I've learned is that it takes a number of things to help people get to 100%.

But acupuncture can really help get people there faster. And I find it's brilliant. I find the herbs are brilliant. And for anyone listening out there who hasn't tried it, I strongly recommend at least trying it for yourself.

Dr. Mark Menolascino: Well you know, Peter, I love hearing your passion and your compassion. And I noticed that the first time we met. Are you still in a rock band?

Dr. Peter Bongiorno: I am not in a rock band currently, although I am proud to say I finally set up a little home studio in my basement a couple of months ago. And I'm learning how to use, it's called Pro Tools software to kind of record. So you have to do the things that make you happy. It's what keeps your spirit going. That's still a passion of mine. And I'm definitely making room for it. So thanks for asking.

Dr. Mark Menolascino: Well my pleasure. For our viewers, a lot of them don't understand about naturopathic school. And we had Joe Pizzorno that we shared some ideas with the other day, who's the founder of Bastyr. And really,

the naturopath training the first two years is the same as, I really feel… a little more physiology, a lot more nutrition. I got 20 minutes of nutrition in four years they disguised as scurvy and rickets. But really you come out of naturopathic school with a really great foundation in nutrition. And combine it with your Chinese acupuncture medicine, it's so positive.

But you also spent time at the National Institutes of Health and Yale, and you saw the academia. So you have really a great balance. That's one thing I always appreciated about how you think about patients, how you think about medicine, and how you think about the world. You have this really kind of whole world view of it.

I think the most common medicine prescribed worldwide right now is antidepressants. And there are some people that benefit from them, but the studies really show that for most people they don't have the benefits that we thought they did. How do you approach someone who comes in with mood disorders? And from all the different tools you have, how do you know where to start? And particularly for women, what seems to be the way that you can help women move the needle right away?

Dr. Peter Bongiorno: Sure. Well when a patient comes in, I mean the first order of business is safety, right. So some people, when they have mood issues, they can be in an unsafe place. And if they're in an unsafe place, then as much as I love natural medicine and changing people's sleep schedule and getting them to go out and buy fish and cook good food and all that, if you're not getting out of bed and you're contemplating hurting your children, yourself, then they're probably not going to go out and go shopping for food and make those changes because they're just in such a dark and dire place. And you have to really respect and honor that. And in cases like that, sometimes some higher force intervention, like a medication, might be appropriate.

Dr. Mark Menolascino: I agree totally.

Dr. Peter Bongiorno: And of course making sure the patient has good supervision. Luckily the majority of cases aren't that dire. And I think the research, as you said, you were mentioning how antidepressants in most cases don't seem to work. That was a 2010 study that was published by a fellow named Fournier in the *Journal of the American Medical Association* that did show that. And it's really true. They don't really work much better than placebo in mild to moderate cases, although they do seem to have increased efficacy in more severe cases. So I've done severe cases, especially if people

don't have appropriate monitoring and looking after, then a drug can be useful. But for the vast majority of patients with anxiety and depression, I recommend starting with the basics.

As you mentioned, to move the needle a little faster, I think acupuncture can be very useful for that. And there are a handful of supplements that also I think can start moving things a little quicker. So depending on the patient's case, we might start with acupuncture and some supplements. But really, my interest is really working on why a person has anxiety or why a person has depression.

And that is usually multifactorial. There are usually sleep issues involved. There's usually not exercising enough, sometimes exercising too much, but usually it's not exercising enough. Foods, foods are very inflammatory. And inflammation will cause changes in the brain, the digestion is unhealthy, and the microbiome and the good flora, the good bugs in your gut, aren't healthy. It changes what goes on in the brain. And that'll cause behavior changes.

And then working on a person's stress, working on how they cope with stress, changing some of the thoughts in the brain are important, and then testing important factors, like testing their stress system, what are their stress hormones like, what's the ratio of estrogen and progesterone, what's going on with that.

So many women I work with, you see there are correlations with what's going on with their menstrual cycle. And then oftentimes estrogen and progesterone play a very strong role in why the brain and behavior and mood changes, because estrogen itself can really affect what goes on with the neurotransmitters in the brain, as well as progesterone. So working on that can be really important too.

And then running all the other lab tests, checking iron, checking vitamin D, the B vitamins, toxicities, mold susceptibility, all of these things can really play a role in why an individual might have issues with mood. So even though there's no one answer, what I talk about to other physicians, what I talk about in my books, and what I try to work on with patients, is really try and identify all the various factors that are possible issues and concerns and really organizing them, and then coming up with the plan to work on them one by one or what level the patient can do it at the time.

Dr. Mark Menolascino: So the hormones for a woman really are crucial for their mood during PMS times, perimenopause, and menopause. And Peter, it's

not the absolute amount of estrogen or progesterone but the relationship. And what do you look for for a balance?

Dr. Peter Bongiorno: So the balance between estrogen and progesterone is very important. One way I think about it is actually I think about estrogen as very Yang - this is more of a Chinese medicine way to think about it - and progesterone to be very Yin. So Yang in estrogen is like movement and light and almost like a more male energy, whereas progesterone is more nourishing and calm and cooler and is more of a female earth energy. And both are very important, right.

So in a woman, both estrogen and progesterone will play a role in how the brain works. Estrogen, what it basically does is when it's at the right levels, it helps keep neurotransmitters also at the right level. So there's actually an enzyme called monoaminoxidase that it affects. And when estrogen levels are good, it helps keep the neurotransmitters up by affecting that enzyme. And progesterone actually has the opposite effect.

So progesterone keeps certain positive mood neurotransmitters down but keep up the calming neurotransmitters, things like GABA, for example, gammo-Aminobutyric acid. And both of them working together help keep things in balance. So the Yang isn't too much, and the Yin isn't too much. And what I've seen is when women have imbalances of them, and that can be either not enough progesterone because… for example, I saw a woman two days go, and we ran some of her hormones. Her estrogens were perfectly in mid range, what you'd want them for her age.

But her progesterone was very, very low and really for that of a menopausal woman, even though she wasn't menopausal. She was probably 36. So she was having anxiety, in my opinion, as a result of much lower progesterone than it should've been for her age, even though her estrogen was perfectly fine. So that's why. It could be the estrogen's good, but the progesterone's too low. Or the estrogen's very high, and the progesterone's normal. Or maybe the progesterone's very high, and estrogen's low, which isn't as calming.

So that's why it's worth doing labs and checking it, and also checking on actual symptoms because the other thing that I've learned is that you can get the very same type of anxiety symptoms when estrogens are too high or too low. So sometimes you have to also look at the labs because the symptoms themselves can actually trick you into thinking one thing. And then if you work on your hypothesis and it's wrong, you actually make people feel worse. So that's one of the benefits of having practiced for a number of years, is I've

learned that, and I've kind of been able to check on that earlier. So checking on the hormones can be very, very helpful.

Dr. Mark Menolascino: And I know you approach every single client as a unique individual, and you assess them in all the different types of medicine you have in your toolbox. But Peter, do you see kind of these common similar patterns that women fall into; there are times when you really don't need the tests because you just see this pattern that you've seen over and over and over?

Dr. Peter Bongiorno: Well I mean every patient is definitely different, right. Using tests can be useful. I mean for example, many women, as the decades go on, you see their adrenal glands start to burn out. And that's very, very common. Women generally aren't taking care of themselves. They're taking care of a lot of other people. They're usually the center of the family. And they're taking care of their kids. They're taking care of the husbands. They're taking care of the parents. They're taking care of the parents of the husband. So generally women are called upon to be many people, wear many hats, and do many things at the same time. And that's tough on your adrenal glands, right.

The adrenal glands are these little glands at the top of the kidneys that are responsible for keeping your adrenal up to keep your energy going. And I think women's adrenals glands are generally very, very taxed. So if I had to pick one common theme that I do see, it's low adrenals. And we talk about the increased amount of thyroid issues, right, in this country, that we're seeing over and over. Well adrenals very much potentiate the ability of the thyroid to even work properly. So a lot of times, even before tweaking the thyroid or even working on estrogen and progesterone, you actually want to start working on the adrenal glands to help all those systems work better.

Dr. Mark Menolascino: So the adrenals and thyroid really are sisters that talk to each other in a way we're not really sure. I think Chinese medicine understands it a certain way, naturopathics a certain way, integrative functional medicine a little bit differently. But it's all a common theme that they work in concert or in symphony or in harmony with each other. And when one is out, it'll drag the other one down.

What's the relationship of adrenal disregulation or dysfunction or what they call adrenal fatigue to depression?

Dr. Peter Bongiorno: Sure. Well adrenal fatigue, so generally when people are

very anxious, especially when they're younger, a lot of times their adrenals are pumping out a lot of hormones. And if you check them at a younger age, usually they're pretty high, things like cortisol and the stress hormones. And then over time they start to get disregulated, and they bounce up and down, because the adrenal glands can't really hold that level of function and all that stress.

So it goes up, then it goes down. And then when it gets a little more energy it goes back up, and it goes down. And then eventually over time, what seems to happen is that the adrenals start to poop out. And then you get these low levels. And what I've seen with most cases of depression, especially depression that starts after a few decades of life, it's often because people have been so overwhelmed and stressed over a period of time that their adrenals are just sort of pooping out, that they're getting very fatigued, and that they can't muster the energy to kind of deal with life anymore.

And that, I think, is honestly the majority of the depression I see. It's really on this continuum of anxiety, anxiety, anxiety, anxiety, and oh, I can't take it anymore. And I just want to crawl under a rock now. I just can't deal anymore. And that is what I see is the relationship for most people.

Dr. Mark Menolascino: I love how you put anxiety and depression on a continuum, almost like a see saw, where sometimes the anxiety's higher, then the depression's higher. But they really have an interplay. And I like your concept of a continuum. And I see that a lot, a lot of anxiety, and then they kind of wear out.

Dr. Peter Bongiorno: Exactly.

Dr. Mark Menolascino: There are some studies that suggest after a heart attack, your number one risk to have a second sudden death heart attack is depression. It's not your cholesterol. It's not inflammation. It's depression. And depression really may be an inflammatory disorder not a neurotransmitter imbalance, according to many people. But how do you feel that depression can affect the heart? Is it through the autonomic nervous system, the nervous balance of the heart? Is it driving inflammation? What's the mood heart connection that you see?

Dr. Peter Bongiorno: Well, there are a lot of underlying mechanisms of heart disease and depression that are very, very similar. And when we think about it, it makes sense that someone who is predisposed to heart issues will also be predisposed to depression.

You named a big one, inflammation. So that's certainly a top one, right, because really, at its essence, heart disease is inflammation of blood vessels, right. We have these blood vessels, where our blood moves through these basically small hoses. And when it gets all clogged up, we end up with heart disease at various levels. Well when we think about depression, depression in one level is really just inflammation in the brain, where aspects of the brain kind of get clogged up and don't work so well.

And there's inflammation, what they would consider fire, right, up there as well. And so heart disease can be inflammation and fire in the vessels. And depression can be inflammation and fire of the brain. And so the ways that we use to work on inflammation for both the blood vessels can also help the brain as well. So I do think that is one of the major aspects of the connection between heart disease and depression.

Dr. Mark Menolascino: How about the serotonin? Well all that serotonin's in your brain, right? Or is it actually in your gut?

Dr. Peter Bongiorno: Yeah, I mean that's a great question. So there's a fellow who came out in the 1990s who wrote a book on serotonin. And he was one of the first persons who talked about how serotonin is actually mostly made in our digestive tract. There is some made in the brain, but actually most of it comes from the digestive tract, probably about 90% of it. So when we think about brain issues and imbalances in neurotransmitters like serotonin, we really do have to think about digestive function first.

Dr. Mark Menolascino: Peter, with regard to acupuncture, we're a small community in Jackson Hole. We have 13 excellent acupuncturists. They all seem to have a niche where they're the best at. So people ask me, "Well Mark, how does this work? How does acupuncture work? How does it affect the body?" I know that's a loaded question, Peter, but do you have a great way how you explain it to your clients about what acupuncture does or how it synergizes with your other therapies?

Dr. Peter Bongiorno: Right. So in Chinese medicine, it's believed that there are pathways of energy that run through your body. And basically when you have sickness and illness, it's usually because the energy's either stuck or there isn't enough of it or there's too much of it. So the idea of using acupuncture is to access those pathways and try to get either the energy moving to build it up or to help it out.

Of course conventional medicine doesn't really have any thinking like that.

But if you look at the studies that have been done in the past two decades in conventional medicine, what they do with acupuncture… because originally I think a lot of people thought well acupuncture, if you lie down on a table and you relax, of course you're going to feel better.

So they thought well maybe that's the main issue. It's really more of a placebo thing. But what they do with acupuncture studies now, at least the good ones, is they'll have people lie down in an environment with nothing. They'll have somebody lie down in the same environment and get points, but they're not real points; they're actually safe points that aren't considered acupuncture points.

And then the other group of people will lay down in the same environment and get the real acupuncture points that an acupuncturist would give you. And what they found is sure enough, for many, many conditions, the acupuncture does work, and it is effective. In fact, the World Health Organization lists over 240 disease conditions now that are bona fide treated as shown by research using acupuncture.

Dr. Mark Menolascino: That's great.

Dr. Peter Bongiorno: And even though there are still theories, one of the going theories is that our bodies have this neural net that surrounds our muscles. So basically we have these bundles of muscles. And then we have all these nerves that kind of cover it in a net. And as you probably know, acupuncture needles, they're very thin. And they typically don't go very deep for most cases. They stay very surface, just under the skin in the muscle layer.

So what's thought is that the acupuncture needles are actually accessing this neural net, which has connections to organs inside the body. And that's really the governing thought. Other people think well, they also help you release endorphins, and that that could be part of it. So we're not exactly sure what it is. There does seem to be a neurological connection and possibly an endorphin connection. But either way, whatever it is, it does seem to work. And we definitely need to do more studies because if we learn more about the mechanism of how acupuncture works, we might be able to figure out other ways to access how to help the body heal too.

Dr. Mark Menolascino: Well our first tenet in medicine is to do no harm. And I think acupuncture therapy is a very do no harm technique with an incredible huge benefit for people. I remember when I was nine years old, Richard Nixon

went to China. And one of this staff members had appendicitis. And he had his appendix removed in the operating room with no anesthesia, just using acupuncture. And I remember watching that thinking oh my gosh, this is something that I want to learn about.

There are four doctors in my family. My sister, who's a psychiatrist, Shelly, she's a psychiatrist in Chelsea and actually in Washington Park, she uses transcranial magnetic stimulation as well as acupuncture, Chinese medicine, and medications. What are some of these other therapies that either you're using or that you see others using that you're excited about to really help us address a whole person approach to mood disorders?

Dr. Peter Bongiorno: Yeah, well as always, I always like to remind my patients, and when I'm giving lectures, there are so many therapies out there and more coming on as we're learning more and more. And it's exciting. So I always like to talk about the basics first, just remind that the basics are good sleep, exercise, eating the right foods, getting the digestion right, balancing blood sugar, working on the hormones, right.

And then adding the other things around it, whether it's acupuncture, transcranial stimulation can be very helpful. I think EMDR is wonderful, especially when people have a lot of traumas. I think that can be very, very useful. Chiropractic, I think, is super helpful because when your nervous system is kind of constricted and constrained and nerves aren't flowing, that's going to be problematic for all parts of the body.

One of the things - you ask what I'm excited about, what am I working on right now - is I'm actually doing a lot of research and teaching about ketamine.

Dr. Mark Menolascino: Tell us about that.

Dr. Peter Bongiorno: Yeah, so for your viewers who don't know, ketamine is actually an anesthetic that's used at subanesthetic dose, meaning it doesn't knock people out, but it kind of puts you in this state that can kind of help clear the brain of things. It's actually been shown to be the quickest way to get somebody out of depression. It actually works within 40 minutes and can last for a number of days and up to even a couple of weeks.

The reason why I'm interested in ketamine is not so much as a drug, because I do think it has a lot of side effects and unfortunately needs repeat dosing over time, and I don't love that for patients in the long term, but what

interests me is that there's a lot of mechanisms of ketamine that actually natural medicines work on. And so one of the things I've been lecturing about is what natural medicines we can use to help support those functions that ketamine sort of works on.

So to me that's very exciting. In fact, at some point I would love to study working on both of them together for even a better effect than maybe a long lasting effect, where if somebody actually does need an infusion of ketamine, for example, that maybe they can follow up with just using natural things for the long term. So to me that's pretty exciting.

Dr. Mark Menolascino: Peter, you've taught me many things over the years. Help me understand. You're talking about a natural supplement that mimics the pharmacologic action in ketamine? Can you share…

Dr. Peter Bongiorno: Well there may not be one. So there are a number of mechanistic actions of ketamine. So one is to kind of clean out glutamate in the brain and in the body, which can also help get rid of inflammation at some level too. So there are a number of natural ways to work on that, certainly with foods, right, to make sure you're not taking foods in that have glutamate in it. So that's why people avoid things like monosodium glutamate. Another thing that ketamine seems to do is it seems to raise brain derived neurotrophic factor.

So exercise raises brain derived neurotrophic factor. Lithium orotate, which is nutritional lithium, can do the same thing. Then there are some other studies which look at how ketamine affects… there's actually a protein complex called mTOR, which you may have heard of. It's basically this complex in the body that depending on the way it's turned on can either… when we say we enhance mTOR - mammalian target of rapamycin is what it stands for - and it's just basically the system in our body that can either help us build things or help us break things down. And what's been shown in the brain of a depressed patient, oftentimes it's switched on to break things down. So ketamine has actually been shown to temporarily help enhance it or kind of build it up.

So there's some wonderful research about a Chinese herbal formula called - I'm probably not pronouncing it right - it's called [Yew Shui]. I apologize to anyone who speaks the language and knows how to pronounce that right. And what's been shown in some human studies and in a number of animal studies is that it actually has some similar effects on mTOR and is actually one of the best ways, as well, to change mood in both the animal models and in the

humans. And actually I see very good results with it in my practice as well. So that's just a few of the things that I've been looking into in terms of the mechanisms of the ketamine. Because again, I'm not a big fan of about telling people just go get ketamine because I don't think it'll fix the problem in the long term. But I think we can learn from it to use natural things to help.

Dr. Mark Menolascino: Well thanks for lifting up the hood and showing us the future a little bit and taking us into the science lab. I appreciate that. It's always great to hear what you're excited about and things that you're reading about and staying on the cutting edge like that.

You're talking about acupuncture, chiropractics. And I want to be sure everyone heard about EMDR. This EMDR is an eye movement technique. And it can really help with PTSD, which so many suffer from that past trauma. So if you do, EMDR is something you really want to look into. But all of these therapies: acupuncture, chiropractic, EMDR, like a lot of therapies, they're operator dependent. They depend on the quality of the practitioner and the experience of the practitioner.

So there are people who are really good at acupuncture and people who are not so good at it, people really good at chiropractic and some not so good. So you really want to find a good one. But they may be different to how they're good for you. So it's really finding one that you feel that you resonate with, that you trust, and really having that resonance, being sure they have the kind of training Peter does, and they're someone you can really trust that way.

But don't just go to someone because someone referred you to them. Go to someone you like to be with that really inspires you and helps you to want to be your best and is good at what they do. It's really that kind of challenge, that you have to take some ownership over your own health and empower yourself to find these people that can help you like that.

Peter, so many people must ask you, what do I eat? What are the brain foods? What are the foods I should eat to help me with my mood or slow down my anxiety? Or what are the things I should avoid? Like you mentioned MSG for some people. Do you have some pearls you could share with us?

Dr. Peter Bongiorno: Right. Well I mean everyone's different, right. So the individual diet that works best for any person who's listening is going to be different. If I had to make some general recommendations, the first thing I would recommend is looking into what they call Mediterranean Diet. So the Mediterranean Diet is probably considered one of the healthiest diets. And

really in terms of longevity and people's happiness, it seems that most people around the world who have the greatest longevity and happiness seem to be on some version of a Mediterranean Diet. And that diet really is filled with lots of vegetables, not a lot of meat, good amount of fish, plenty of beans, healthy oils. And that's what seems to generate good health, good microbiome, meaning good bacteria in your digestive tract, and a healthy brain.

There are studies from a group called Sanchez and Villegas from a few years ago in Spain. And they looked at the Mediterranean Diet. And it's shown that people who ate and adhered to that diet had at least a 50% decrease in anxiety and depression. So we know that eating that style does work. And I'll tell you the truth. I mean maybe I'm a little biased because I'm from Sicilian background. But it's really delicious food too. I mean so you don't even want all the kind of fried doughnuts and all that stuff when you can eat these delicious Mediterranean foods.

And what I do emphasize with patients when starting them on that type of diet is eating more fish, unless you're allergic to fish. Fish is probably a really good choice, looking for low mercury fish. So you can go online and find sources of which fish are lowest in mercury, things like salmon, because they have the really healthy oils which our brain needs for really good function. Plus they have proteins and peptides, which are really good for our gut function too. So I think fish is a great choice.

And if I had to pick a second food I'd probably pick fermented foods because fermented foods have all the good bacteria that our gut needs for good brain health. And I can tell you all the information and research now coming out about how important the bacteria in our digestive tract is for really good brain health.

So things like fermented foods, there's kimchi, which comes from Korean tradition. Sauerkraut has very good [inaudible]. People are drinking kombucha, which is getting pretty popular. And that can be helpful. There's natto; there's fermented soy foods. So there are all these beautiful fermented foods. I go to a market here in Union Square in New York City. And they even sell fermented beets. They're beautiful. They're delicious to eat. And they're so good for you. So looking for those foods can be really helpful too. So Mediterranean diet, fish, and fermented foods, I think, are a great place to start.

Dr. Mark Menolascino: Well, you know, a lot of people have heard about this concept of leaky gut, but the new one is this concept of leaky blood brain

barrier, that there's a relationship of the gut lining to the brain lining. And that there may be a communication through the immune system and neurochemicals of how those two talk. Have you seen much work done on that, Peter?

Dr. Peter Bongiorno: It's an interesting concept. Actually when I was doing research at the National Institutes of Health in the 90s, right, the going theory in the early 90s was that the brain was still kind of sort of this black box that things really didn't get in and out. In fact, we didn't even think there was really an immune system in [inaudible].

And then actually some of the research we did, we did work with rats and actually stress with rats and found that inflammation got turned on in the brain. And probably our lab was one of the first people who were looking at that kind of thing. The other thing we did is we took… it was called lipopolysaccharide, which is really this bacteria. And we put it in the bodies of the animals and found that when this bacterial toxin was in there that the brain got inflamed too.

Now you mentioned leaky gut. This is actually what happens in a lot of us who have mood issues, that our guts have these bad bacterias that get through, and it gets into our system, and it ends up in our brain because the blood brain barrier is also kind of leaky.

And I think what happens is whether it's foods that aren't good for us or bacterias that are in there and creating all this inflammation in the digestive tract, it gets into our blood stream. It gets to our brain and over time breaks that barrier down too. And that's why we end up with issues in the brain. And I believe that's the reason why the gut and the brain have so much common issues. I think it usually starts with the gut and ends up happening in the brain as well.

Dr. Mark Menolascino: That makes sense. Our ancient wisdom is just that, it's wisdom, why you feel things in the pit of your stomach, why events can be gut wrenching. There's a reason we have those colloquial terms like that.

Peter, the first time I really looked at this relationship was in college. And I was told the brain is a black box when I worked with neuropsychiatrists. And I saw when people took injections of a drug called interferon, interferon beta, for multiple sclerosis - it was the drug of choice for multiple sclerosis - your biggest concern was that they would get depressed. And I always wondered how a drug that would manipulate the immune system would make you

depressed. There had to be a relationship there. And so it's exciting to see the black box being cracked open. And the more and more we're learning, it's helping us get better at it, but it's also making it a little more confusing.

Dr. Peter Bongiorno: Sure.

Dr. Mark Menolascino: That's maybe the excitement of studying the brain.

Dr. Peter Bongiorno: But you know, one of the things I believe is the more we learn and the more confusing - because it does get confusing, especially in the age of genetics and all the things we're learning that affects the genes - the more I'm also seeing that the basics still apply. We're learning even more why sleep is important and why the foods we eat are important and why exercise.

So in some ways it's more confusing, but in some ways to me it really still emphasizes the things we already knew about health for centuries. But now we're learning more specifics about why they're so good for us. So to me it's very inspirational because it just lets me know, yes, we are on the right track with these natural remedies, that these things are working for us and now we're learning more and more why.

Dr. Mark Menolascino: Well I hope our viewers take away some of the wisdom that you shared with us. And I really want to emphasize how I heard you today, Peter. I hear a practitioner who looks at the individual and doesn't look at how that individual is part of a population but looks at that individual uniquely. And that's what I encourage all of our viewers to ask of their practitioner. And you also have a lot of confidence in the basics, going back to the lifestyle basics, because you've seen that when you address those, good things happen.

Peter, I know you're an international lecturer. You've written books. You worked at National Institutes of Health. You are a graduate of Bastyr. You worked at Yale. You've got a great, fantastic background. What are some of the things that you're excited about for the future?

Dr. Peter Bongiorno: Well I think the genetics piece is very, very interesting. And I think that's something that is still in a very seminal state. I know a lot of us are looking at genes and thinking oh, okay, you have this gene. You have to take this vitamin. And I'm not sure we're there yet, but I think there's so much to be learned that can really help us understand a patient at an even more individualized level. So I'm really excited to see what's going on with the genetics piece.

Something else I'm also really fascinated about is mitochondrial function, so mitochondria, the little energy packs in our cells. And I think as we learn more and more about them, we're going to learn that they really have a very strong role in why people get sick in different ways, whether it's mental health or cardiovascular disease or neurological disorder or Alzheimer's or cognitive dysfunction. And I think learning how to help those energy packs and getting more information about that is going to accelerate our ability to help people heal, too. So I'm really excited about those things.

Dr. Mark Menolascino: Well Peter, you're a teacher of teachers. I know you've written a practitioner guide as well as a consumer book. Could you tell us about those?

Dr. Peter Bongiorno: Oh, thank you for asking. Yeah, so I do have a book called *Holistic Solutions for Anxiety and Depression* that was published by Norton. And that's a textbook for the practitioners out there and the physicians who want to learn more about the research behind natural medicine and how it helps in guiding depression.

And then for the public, I have a book called *How Come They're Happy and I'm Not*, published by Red Wheel and Conari press. And that's about depression. And then my latest book is called *Put Anxiety Behind You*, also published by Red Wheel Conari. And that's, of course, to work on anxiety. And they're really drug free programs that go through all the things I talked about in more detail and discuss the things to look for and the factors to work on.

And there's good information about finding functional medicine and integrative medicine practitioners and naturopathic doctors in the books too. Because I always think it's important to work with somebody locally, someone, like you were saying, who you have a good connection with, somebody who you trust, because it really is a journey. And as a practitioner, it's really an honor to go through that journey with each patient. And finding the right practitioner who will take that journey with you really makes all the difference in the world.

Dr. Mark Menolascino: Well, Peter, I have your first two books, which you were kind enough to sign. They're sitting right there on my bookshelf. And I will get the third one. If our viewers wanted to connect with you, how do they find you on the internet?

Dr. Peter Bongiorno: Oh, sure. My clinic website is innersourcehealth.com.

Phone number is 631-421-1848. And I do have a personal website, drpeterbongiorno.com.

Dr. Mark Menolascino: Well great. Dr. Peter, I really thank you for your time today. It's been enjoyable for me to listen to you. I always walk away with some new things to think about and to be excited about in medicine. You're a teacher of teachers and a healer of clients. So again, Dr. Peter Bongiorno, thank you for your time today.

Dr. Peter Bongiorno: Oh, thank you, Dr. Mark. Thank you for doing this show and for spreading good information and just being an amazing teacher and inspiration yourself.

Dr. Mark Menolascino: Thank you.