



# Pain2Brain

CHIROPRACTIC NEUROSCIENCE  
SUMMIT



**Dr. Nancy Lonsdorf**

## Healthy Brain Solution for Women Over Forty

**Marcus Chacos**00:14

Welcome to the Neuroscience of Chiropractic. I'm excited to share with you Dr. Lindsay Lonsdorf's presentation today on such an important topic, and one that we're all going to gain from and we're going to expand the scope of what it is that we discussed with us. And this can be very, very valuable for everyone. Dr. Nancy is an award winning integrative physician, author, speaker and educator specializing in Ayurveda, integrative medicine, potential reversal off cognitive decline. And I think, given what is taking place in the world, and increasing incidence and rise of these neurodegenerative conditions, this is such a pertinent and valuable topic. Dr. Nancy is grounded in traditional Western medicine, having received her medical degree from Johns Hopkins School of Medicine and residency training in psychiatry at Stanford University, Dr. Nancy trained in the Institute of Functional Medicine with ??, which is such an important teacher and is the founder of the president rehab protocol for the reversal of cognitive decline. And Dr. Nancy is certified practitioner, we're going to get some incredible insight into that crisis. She's also the author of the best-selling book, The Healthy Brain Solution for Women over 40, 7 keys on or off hormones, as well as a woman's best medicine and a woman's best medicine for menopause, and many other resources as well. These are central reads for women and for the people who love them. I think we're going to get some incredible insight today. Dr. Nancy, welcome. I'm very excited to be able to share your message with the neuroscience audience today. Welcome.

**Nancy Lonsdorf**01:47

Thank you so much, Marcus, I'm excited to be here and really look forward to sharing with your audience.

**Marcus Chacos**01:53



Well, I'm actually really looking forward as well, this is such an important topic, minimizing the impact of neurodegenerative decline, and I know that you're going to share some great insights, let's jump straight into that presentation.

**Nancy Lonsdorf**02:06

Beautiful slide that you have for your logo here for this conference. It's a beautiful expression of that synaptic and plastic quality of the brain. I like to think of the brain more as clay because I'm more of a natural kind of person, I guess, like most of you chiropractors, but that's just a little side joke. So, actually, we're talking about a really serious problem. As you probably know, Alzheimer's is referred to as a global epidemic and there are over 50 million people living with Alzheimer's, whereas 92 million have been diagnosed with COVID-19 to date, however, most of those have recovered. And unfortunately, once a person has Alzheimer's it's considered to be an incurable, non-recoverable disease. In the United States, it is now risen to be the third leading cause of death. And in the UK, it's the number one cause of death. And two thirds of Alzheimer's patients are women. The incidence increases sharply with age and after 85, there's about a 50% chance of having dementia. Currently, there's no cure, although not for want of very well done and many hundreds actually of clinical trials on drugs that aim at reversing the pathology, the neuro pathology of the tau tangles, the amyloid deposition, and yet, nothing has worked. Basically, there are cholinesterase inhibitors, which are drugs that are given to boost the acetylcholine in the synaptic junctions. And that has some temporary effect to improve the memory slightly, or at least just to maintain it steady for usually about six months, and then people tend to start falling off the curve again, and they end up still dying of Alzheimer's, if not something else before. Those drugs do not reverse the actual progression of the disease. And in fact, some of those may do more harm in the long run. And there's a recent study that came out a couple years ago that indicated that perhaps the use of cholinesterase inhibitors and amantii actually are associated with greater cognitive decline than not using them at all. Now that's somewhat controversial because there are other studies to the contrary, but just suffice it to say it's not a clear cut benefit for the long run. This is diagram of our beautiful healthy human brain, nice and plump with lots of neurons and synapses and connections, really an awesome organ. And deep within the temporal lobes on either side, we have the hippocampal formation, which is key for our formation of new memories, short term memory. And next to right next to it the amygdala, which we know is important for our emotional balance and also has memory functions as well. Now, this would be that nice healthy brain that we just saw in cross section, this would be a CT scan or MRI of that in the coronal section from the top. And the thing is that that is nice and plump. As you can see, the brain tissue is right up against the skull and it's quite full. Here in the middle, we see that the ?? are starting to widen. And that's simply because the brain matter itself is shrinking. And here we have a very severely atrophied brain and see, that person's obviously not going to be functioning very well. So what causes Alzheimer's disease? This question mark is still pertinent today. For dozens of years, the amyloid theory has

dominated research and drug trials, and that they see that this protein beta amyloid is deposited in the intercellular areas of the brain, and it interferes with connections and ultimately causes loss of synapses and degradation of the neuronal integrity. Tau tangles are getting more attention lately. Those are tangled, little tiny channels and circulatory like intracellular passages that are getting all distorted and tangled within the cells. And yet nothing that's aimed at addressing these directly has yet proven to be effective to stop the disease or cure it.

**Nancy Lonsdorf**07:24

Anybody who's reading the papers or journals, or our practice summary sheets every month that will see that the feeds often have questions such as is Alzheimer's an infection, or some latest research comes out on the effect of sugar and diabetes on the brain. And then is Alzheimer's diabetes of the brain. Research on air pollution in major cities and Mexico City in particular, does air pollution cause Alzheimer's? Is Alzheimer's caused by a virus such as a herpes virus? Because that has been found to be highly prevalent in autopsies of patients with Alzheimer's. Is Alzheimer's caused by inflammation? Well, those are all very good questions. And the reason why they're headlines is because there's some research that has started to come up that supports those theories. And it's not that any one theory is wrong or right, but that they're all hinting at processes that can be detrimental to the brain. Here we have Dr. Dale Bredesen and he's giving a talk here, here I was interviewing him. This is the Buck Institute of Aging where he spent many decades actually three or plus, researching Alzheimer's with drug trials. That's of course, how he funded his studies and he was very convinced he shares with anyone in his books and his audiences that he was very convinced that a drug and would discover how to reverse this process. And this is one of his principal research scientists Ram Rammohan and he is really brilliant scientist and he had worked closely with Bredesen for years and he shared with me that he had started to bring up some of the Ayurvedic principles, Ayurveda is the system of natural medicine from India, you've probably heard of it's like similar to traditional Chinese medicine, but from India, and Dr. Bredesen was interested in that and he actually co-authored some papers with Dr. Rowe on the Ayurvedic herbs and their effect on the brain and other Ayurveda processes, and also profiling subtypes of Alzheimer's based on the Ayurveda principles. But that was only the beginning really, of his diving into alternatives. And Dr. Ross shared with me that at some point in their many meetings at the Buck Institute with, you know, one drug trial after another failing and failing and failing, you know, there was somewhat of some demoralization or discouragement by that endless process over decades. And some of the lab workers started to bring in articles, Oh, it looks like tumeric, you know, might reduce inflammation, and maybe that has a beneficial effect to promote better memory, better cognition, or perhaps it could help to reduce the incidence of Alzheimer's disease. So many different articles from different directions came in. And finally, they prevailed on Dr. Bredesen to the point where he just kind of had a breakthrough, as was described to me that he just said, Look, let's gather everything we can find in the literature. Put it all up here on the on



the whiteboard. And we'll look at it. We'll examine it all as a whole and see, is this something we want to delve into, is this worth us putting some attention on? And when it was all said and done, he decided that it was worthwhile. And he started to write some grant applications, but of course, because they were multiple,

### **Nancy Lonsdorf** 11:30

different interventions within one study, not just one active ingredient, and we're all familiar with that. He was not successful in getting funding from numerous sources. In fact, some of them returned, Dr. Bredesen, you have been a very serious scientist, what are you thinking? Like? Well, he was thinking, well, nothing's worked. So we have to try something. And actually, this is his first paper that he wrote, which was this case series. And that was published in 2014. In the aging, and he documented in a series of patients who implemented a kind of broad range multifactorial treatment program, which addressed inflammation, addressed blood sugar, addressed nutrient deficiencies, hormone deficiencies, that address toxicity that may be there in the body and tried to address everything - lifestyle, sleep, exercise, quality of the diet, all of these things. So trying to address everything that could possibly impact the brain in a positive way to shift that from balance from decline to at least stabilizing and hopefully getting better. And this actually, this research is the first that's ever been published that documents in, you know, real people, real human subjects that cognitive measures, and including brain markers and brain measurements of the MRI and quantitative measurements of different areas of the brain actually improved. So this was a landmark paper. And in his training program that I took at the Institute of functional medicine, three years ago, he shared this slide. And he was presenting a 66 year old male who had one of the two gene copies, that was putting him at higher risk for Alzheimer's and higher risk for inflammation in general, and had presented to him as a CEO who used to be able to remember and add like, columns of double digits in his head. And at the time that he came, he was having trouble even remembering his locker combination. And he was struggling at work. And here were his markers of metabolism, as Dr. Bredesen likes to say, as goes metabolism, so goes memory. So his fasting insulin was in the range that you would see in a diabetic, it's way too high, a lot of insulin resistance. He had a high CRP and lots of inflammation in his blood. Probably because his diet was horrible. I've you'll see probably if you've been checking the hscrp that it correlates highly with the purity of the diet. homocysteine was very high probably as B vitamins were insufficient his vitamin d3 was very insufficient, and is hippocampal volume. This is through quantitative measurements of special software that can be applied to an MRI scan. And his hippocampal volume was down at the 17th percentile for his age. So he implemented all of the recommendations that he was given very seriously, he did want to try to recover his cognitive function. And after 15 months, he had his fasting insulin down to eight, which is close to the optimal range. I mean, super optimal that Dr. Bredesen wants to see everything really super optimal. CRP had dropped by two thirds, homocysteine was now in a decent range. Vitamin D was just barely adequate. But you know, 40 is okay. He



was back working full time. And this is what really got me this MRI, he had a repeat MRI less than a year later, and his hippocampus had actually grown back, who was now at the 75th percentile. And that little piece of data I found extremely motivating and inspiring. And I wanted to really start to apply this with my patients. So I have and I'll share with you today, a couple of the case vignettes so that you can get a sense, I don't expect to teach you everything today, you can go to Dr. Bredesen's site and you can take an online training if you want to learn this to apply it in your practice. And if you're inspired to learn Ayurveda, there'll be a link at the end I'll share with you as well. So here was another study that was done after that, oh, this was following 100 patients that were patients of a variety of practitioners that had worked with or studied with Dr. Bredesen over a few years. And they pooled their case reports. So they came up with another 100. Now, right now, they have actually a

### **Nancy Lonsdorf**17:02

clinical trial going on. It's not double blind, but placebo control. But it's actually a randomized trial in advance of people either getting standard care or this program. And looking at how they do over a period of at least one year, I think two and these are people that are not severely cognitively impaired, but they're in mild cognitive impairment. So they have measurable loss. But they're in that area that you could expect that within a year they could have improvement. And as with most things, their cognitive decline is easiest to turn around in the earlier stages, with the least amount of loss. And the younger you are generally the better it works. I just wanted to bring to your attention this molecule, which is the precursor molecule to amyloid, it's called APP. And I like to call it a barometer. a barometer measures the pressure outside, right, it goes high, and you think you're going to have sunny skies and it goes low, you think of weather system's coming in. And the same thing here in the brain, that molecule here in the center, it can be broken down by enzymes into one of two things, it can go in the high pressure direction is this direction is cleaved into two parts. These sub molecules are actually brain nootropics they promote the growth of neurons and increase of synaptic connections. So this is not a bad molecule, this just it's a it's a bi potential molecule, it can go either to something very, very good for the brain, or it can go into something very, very well, I think, as members of the chiropractic profession, you probably believe in the innate healing ability of the body and the innate healing intelligence. I think that is a very germane principle that you work with every day. And I would say, Oh, this is very harmful to the brain. well in excess, yes. But the purpose of this amyloid, scientists are beginning to believe and theorize is that it is actually trying to protect the brain. It's trying to protect the brain from heavy metals or bacteria or viruses, because it is produced in greater amounts and is often found surrounding those kinds of invaders to the brain as if trying to protect the brain from those but obviously with excess exposure and over the years, maybe bad food, or just polluted air, or bad water or drugs or you know, too much alcohol, who knows what it is. But all those things that challenge the brain, they may be promoting the breakdown of APP to amyloid, and then the amyloid is building up, building up building up building up, and



that then eventually clogs the brain. So it's really imbalance, we would say, it's an imbalance if we've got good food going into the body. And we've got all sorts of protection, like here with the apples and the tomato and all these good greens, then we have more of the good direction of the APP breaking down to growth factors in the brain. And if we eating this kind of stuff, then we are going to be pushing the other direction. So from an Ayurvedic point of view, we have the term it's all about balance, balance is the key to perfect health. We need protection, if something does sneak into the brain, we need to sequester it and protect it, protect the body from it. But we also really need APP going in the other direction to keep us forming new synapses and growing our neurons and creating new neurons.

#### **Nancy Lonsdorf**21:31

So here is a diagram that Dr. Bredesen had presented, which just it hints at all the different chemical pathways that are involved in influencing the direction that APP goes whether the growth factor or to a potentially damaging factor. So he said, there's no wonder we can't find one drug, we can't find a drug because we might affect this pathway and this pathway and this one, but there's still say 33 other pathways that are knocking on the APP molecule and causing the degradation. So we need something much more comprehensive than a drug with one active ingredient. It's like a roof with 36 holes. If you plug a few of them, and it's raining and you expect the water not to come in. That doesn't work. So the old is that it's amyloid or we don't know what causes it and there's no cure. The new principle is no one loses memory for no reason. There are over 36 contributors, fix enough of them and people will get better. Here, I wanted to highlight the changes in women's brains. And this was a cross section over different age groups that Lisa Moscone, a neuroscientist in the US at a university on the East Coast, she did this initial research. And this really jumped out at me back when it was published in 2017. That actually inspired me to write a book because I wanted to share with women that now after 40 is the time to actually start implementing if you haven't already those healthy habits that will protect the brain. And here this perimenopausal transition time appears to be a very key and critical transition for the brain. And this documented pre-menopausal brain, the red is metabolism and metabolism is associated with blood flow and good mitochondrial function and basically good cognition. So you want to see the hot, the red hot areas, and then perimenopausal the average women going in that so this was like age 40 and before and then this was an average or representative of the average brain PET scan of women kind of in the middle of perimenopause, like 45 to 50 some. And then after menopause several years after, you see there's even a little bit further loss in different areas of the cortex here. So that's a big, big jump.

#### **Nancy Lonsdorf**24:40

And in contrast, if you look down here on the right bottom corner, this is a male at baseline. Interestingly, the women as an average had better metabolism up to age 40 than the men.

Maybe that's the typical multitasking kind of feminine estrogen-laden brain, but after three years really there was not much, not much change. Not much changes going on between the average at baseline and three years later, whereas the females going from pre to peri, there was a huge drop in mitochondrial function and or metabolism. So the question, of course, is, well, maybe we should be giving all women hormones at this time, does giving hormones at this perimenopausal transition time, the first 10 years as the period is changing and going away? There is some research that suggests that. But there's a lot of there are conflicting studies, shall we say and depending on what agent of inform the estrogen was the progesterone was what age the women were studied. But I would say in general, that it seems that easing this transition is probably a good idea. And my theory, which is totally not based on any, anything other than some conjectures that perhaps it'd be really worth studying if those women are really having a lot of trouble because only about a quarter of women have severe perimenopausal symptoms, about 50% of women have kind of medium, and then about quarter don't have, they don't notice anything at all other than their menstrual cycle drops away, but they don't get the hot flashes, sleep disturbance, memory, mood issues, those things, sleep disturbance, memory, mood issues, they all speak to trauma or stress on the brain. So it's perhaps those women who are having the worst time if they get some hormone therapy at that time to ease them through the transition, maybe those are the ones that are particularly going to benefit. We don't know, it takes a lot of people and a lot of money and a lot of research to sort those things out. But there is one trial going on that keeps continuation trial, which is following up women long-term who were randomized to either hormone therapy with transdermal bioidenticals, or placebo. And they're being followed up long term and in another three years about, we will have that data and hopefully that will be very helpful. And it's following women from about this age just at the onset of perimenopause. So that was my book. You know what it's like to write a book some of you are few thinking about it even takes a lot of energy to think about it. But I was really stoked, I really wanted to share this knowledge with women and subtypes of dementia, actually, this is something coined by Dr. Dale Bredesen, and he has operationalized five different categories based on people's metabolism bloodwork. And looking at them. First we have type one, there is overlap, by the way, type one inflammation. And I look at this as especially the inflammation that you get with HS high sensitivity or heart specific CRP, the kind of inflammation that mostly comes from bad diet in my experience, subtype of that is imbalance sugar metabolism. Insulin resistance is very dangerous for the brain. Insulin is a trophic growth hormone for the brain, you need the cells brain cells to be able to respond to insulin if they become resistant to insulin, that causes considerable lack of growth factors that the brain loves and needs, as well as sugar itself can be toxic to the brain in excess.

**Nancy Lonsdorf**28:59

Second type, type two is atrophic. And that has to do with lack of nutrients, lack of hormones, perhaps lack of stimulation, brain exercise, learning things new, that category. These people

are often following healthy diets, but they're just not getting the nutrients or the hormonal balance they need. Type three is a very challenging one to treat, I can attest to that. And that is a type three is often with people who don't have the increased genetic tendency for Alzheimer's or cognitive decline, but they often have a preceding extreme stress or depressive symptoms. And they often have exposure to toxins including mold, which can activate other elements of the immune system that you find that kind of inflammation through other tests other than the HSCRP. And that's a very challenging but important diagnosis to make and to address it as best you can to help those people safely detoxify whatever you find would be the cause. Type for vascular dementia, of course, that's associated with higher blood pressure, often not so well controlled blood pressure studies have come out recently that even moderately or mild to moderate elevation of blood pressure in midlife like 135 over 80, something is associated with worse memory later in life. And I have to say, I think vascular dementia is very challenging to treat, I guess, you know, at that point, there's a lot of damage to the circulatory system and it doesn't really matter what things you give it if they're not getting where they need to go. That's difficult. Traumatic dementia, I just have a patient who was a football player. And he's actually now getting better. He used to be very smart, he started to have to work at kind of like a home, shall we say, like a home, do it yourself, fix it big warehouse store, where he was mostly doing physical work. And he was not able, about four months ago, for the last few years, he couldn't learn anything on the computer, there was a task that he was supposed to do. And he, he just couldn't do it. And his wife just wrote us last week and said, guess what, he can do the task. So it can be reversed, there can be improvement, and that's really, really fulfilling. So I broke it down to seven keys to staying sharp, tame your inflammation, and you're familiar with a lot of these things, diet tumeric omega threes, meditation, this was tm, it lowers cortisol, keeping stress at bay, healing the gut, avoiding those excess carbs, getting the proper nutrients, we test for all these things. We do very elaborate blood tests, 36, or 40 items and 17 tubes of blood and but we get a really comprehensive picture of people's nutrient hormonal status and their metabolism. Also, we do screens for toxicity, heavy metals, hidden types of inflammation. And we also, we call that whole testing the cogoscopy, sort of a play on words for the colonoscopy. So I also wanted to briefly talk about Ayurveda, to give you a little sense of what that can offer. And here I have one of my patients, who's a social worker, and I interviewed her it's this is about a three minute I think clip... four minute and she's going to tell a little bit about where she was before she started this program. And she actually just had implemented the the change in diet, a pretty dramatic change in diet for her from this inflammatory high CRP state that she had been in, and she did some Ayurveda herbs. So I'll just let her tell her story.

#### **Patient 33:25**

I did notice a cognitive decline in the last six months to a year. And it was very concerning to me, because my mother had passed away with Alzheimer's. And at the end of her life, she had difficulty remembering family members. And what I was beginning to see was things like,





numbers were really very difficult for me, like in my work, four to six digit numbers, I would take that put it in my brain think I would transfer it to another place in the computer. But by the time I got over there, I couldn't remember. I also noticed that I was having trouble with remembering words, I do some in service training in field that I work in. And so as I was talking, and giving speeches and teaching, I noticed that I had forgotten words and would have to engage the audience to have them try to help me say what I wanted to say. I was also having trouble with remembering, I would be sitting somewhere and I would think I have to remember this, I want to add this to my list because I'm a list person. And by the time I got a paper and pen, I had forgotten what I was going to put on that list. Short term memory was very difficult for me. Timelines were difficult trying to remember what had happened in the last week or last month, the last several months. And so all of that was just extremely concerning to me. (Tell us about what you did. And then what you we're noticing) you given me a protocol based upon Ayurveda principles. And it included diet, included lifestyle changes, like structure to scheduling, when I should eat, and what I should eat, as well as some herbal supplements. And I had decided after I left your office that I'm going to be absolutely committed to this because I do not want to go down that road that my mother had. And so when I came back, I made those changes, I began to follow the diet very closely, ate a lot of vegetables and grains, and also the lentils and things like that, and also structured my bedtime, which was something that was suggested and took the herbal supplements just as they were suggested. And within two weeks time, I could see a huge difference I can I recognized that as I was trying to transpose those numbers in the computer from one place to another, I was remembering them rather than having to write them down. It wasn't difficult to remember words anymore. When I was in conversation with family or friends, or even in the trainings, and I just began to recognize and see that and I was going, this is incredible. This is absolutely incredible.

### **Nancy Lonsdorf**36:41

So here I'll just say Ayurveda is the sister science of yoga, comes from the same tradition in India. It's been in continuous practice for about 5000 years, even though it fell out of widespread use or favor when the British took over, but it has really bounced back and there are Ayurveda colleges and combined medical doctor Ayurveda doctor programs throughout India. So I wanted to just also talk just briefly to give you a picture of how Ayurveda can be helpful in the brain and what I'm doing that you know we've come to realize healthy gut is healthy microbiome and that's like, you know gut health has become a household word. And thank goodness Ayurveda and Socrates, both said that health begins in the gut. And digestion is key to health. So healthy gut also means a healthy brain, there's tremendous amount of interaction, as you know, across the gut lining, from messages and biochemicals from the gut microbiota, and the interaction with the immune system, that 70 plus percent is in the gut. And then through the connection through the vagus nerve as well as through the bloodstream circulation, there's a huge interaction between gut and brain. Now Ayurveda says beyond that, it says that, that it has a concept called the



tridosha theory, which you can read about if you haven't already. And it basically says, well, it's useful to look at every part of the body in isolation, but let's look at what's common to all the parts of the body from the organ systems, organs, tissues, cells and sub cellular components. And it says that there are three basic values it identifies and one is the circulation movement flow, that value, which is dominated by the neuroendocrine system, flow of information through the nervous system, causing the beating of the heart and causing the muscles to move and all of that. And in the gut, it is associated with all of the interactions of hormones that govern the digestive process and the peristalsis and all of that, then we have another value called Pitta which is the metabolic, it's the transformation, is the energy production, it's breaking food down and extracting energy. And it starts in the mouth, of course, but then you know, in the stomach, we have all this stuff that the acids and the HCl and then we have enzymes from the pancreas and all of this is working to biochemically transform food into the simplest molecules of fatty acids, amino acids, and simple sugars. So all that's happening, that's Pitta, it says a cause a Oitta, this other was called Vata the movement principle and then Kapha actually involves all of the gut flora and the mucus and the mucous lining. It has to do with structure. It has to do with integrity of the lining of the gut. It has to do with all the bacteria that live there. So it's protectant. It's structural. That's the Kapha quality. So I just wanted to share with you a short message that one of the participants in a course that I was teaching, Ayurveda health practitioners, he came up to me and he said, I just wanted to let you know that I'm here because I tried hearing or learning a little bit online. And then I implemented it and here's my story, so I asked him if I could record it. So here he goes.

#### **David Masata**40:51

Hi, I'm Dr. David Masada I'm an osteopathic physician. I'm a family practitioner. I work in Rancho Cucamonga and California. In the past few years, I started becoming more interested in holistic, more integrative medicine, one of my friends actually introduced me to medicine, and she recommended your website to actually try and sign up for it and start doing it. And that, to be honest, the first time I went through a couple of the lessons and initially, it didn't really make sense to me a lot, you know, Vata, and Pitta, and Kapha and things like that, it just didn't really make sense. So after a couple of lessons I actually turned off the computer and said forget about this. This is not really for me. A few weeks after this, I had a lady come in with abdominal pain. And I looked at her and she was thin. She was exercising a lot, she was eating a lot of vegetables but her complaint was abdominal pain, constipation, bloating. And the second she said that the first thing that popped into my head was Vata, as well just things actually remembered from the lessons, I looked online. And you know, after the visit, I told her, you know what, I'm going to get in contact with you in a couple of days and I'll try to treat a little bit differently than the way you were trying to do it before because she was technically doing the right things. She was exercising a lot. She was eating vegetables, raw vegetables. And, you know, things were just not getting better. And I went back and I looked at the lessons again, and



I gave her some of the recommendations that ?? was giving us during the lessons and after a month she came back and she said, you know what, I've been having this pain for such a long time and this is actually the first time I've actually started to feel better. And that really made me come here and try to learn more Ayurvedamedicine

### **Nancy Lonsdorf**42:51

So a few tips. Were almost at the end here, you know, obviously, eat a lot of fresh vegetables, berries, blueberries, in the morning, increase your ?? in the afternoon. Some studies show organic to avoid as many pesticides and additives as possible. Keep the carbs low. It really depends on where you are on that spectrum of how is your cognition and how does your insulin sensitivity look when you check your fasting insulin and your A1C and all. But in general, you don't want to eat this because it's going to degrade your insulin sensitivity no matter how good it is now, eliminate those bad fats This is so important. The brain is over 60% fat. And if you are eating bad fats, your trans fats or distorted fats, those are becoming part of your cell membranes in the brain, that's going to be probably stimulating that APP molecule going in the wrong direction towards amyloid. Exercise. One study found that it didn't really matter what exercise you do and how frequent and all that but if you average over a six month period, that people that had a positive effect on their cognition, were exercising, doing something a total of at least two hours per week. Sleep is hugely important for the brain, you know the neurons shrink and the intercellular spaces increase and there's a increase in pumping of cerebral spinal fluid which you know way more about than I do, during the night and so we want to get that good sleep. Ayurveda even tells us we'll get better sleep if we go to bed early, there's more of the cleansing and the healing goes on early in the night. Don't eat for three hours before bed so that the body is in a mode of cleansing and naturally will be, it's called autophagy. There's ways and cellular components that are broken down that are basically digested during the night. Ayurveda said this forever. It says that between 10pm and 2am is a cleansing cycle. So you don't want to have a big meal in the evening and you don't want to eat, you know, after like seven o'clock. So don't eat for three hours before bed. That's a principle in this brain recovery program as well. Fast for 12 hours, at least from dinner until breakfast the next day to also give the brain a chance to and the body to go into ketosis and start burning fat, which is a very healthy fuel for the brain, you know, has healing properties over and above burning sugar, or glucose, learning new things, whatever it is just keep learning and enjoying various things. Methyl B12 is so important I've have 1000s of vegetarian patients over my lifetime and many of them are low in B12 and that's really dangerous for the neurons. Keeping the other B vitamins up will help homocysteine which is a brain toxin, vitamin D is always important. And brain rejuvenatives, there are plenty on the market, Ayurveda has always recommended Bacopa or bacopa monnieri, gotu, Kola centella asiatica ashwagandha these are very good for adrenal system and also have been shown to help learning and memory.



**Nancy Lonsdorf**46:32

So last point here, it takes about six to 12 months of living the protocol, meaning doing that everything good, and really trying to implement everything possible to support the brain turning around from declining to growing and recovering. So people have to be motivated, it works best if they're under 75. Although I've had people as old as 80 who turned around and a few weeks pretty dramatically that was a yoga teacher, she had a good diet already. But she was deficient in some nutrients. And she got on track with all of that and was doing lots of pranayama those who love yoga, will know about that. And she recovered her memory. She was gone to the point where she couldn't go to the local store because it's a very small town, she would see people and she was mis-recognizing them. She thought they were another person. And her children were telling her she wasn't following what they were telling her so that all reversed. And it was very nice to see. And this is one of my patients, Jeffrey, who wrote a book, he's a poet, he's a writer, he was a teacher, a professor in literature, Tracing the Storm Birds Descent. And he recovered he came in really quite depressed and had been to neurologists and the major medical centers and had all the tests and been given even an experimental drug which did not sustain any improvement for him. And he followed the program with his wife, and after about a year, within a year, he had quite a meaningful improvement. He was testing in the Alzheimer's range, cognitively before this, and I'll just play the last minute or two of this for you.

**Jeffrey** 48:33

The title of my book is called Tracing the Storm Birds Descent. And at that time, I felt I was in the storm, the title of my book.

**Nancy Lonsdorf**48:51

And then we'll hear a little bit more about how what do you found so helpful?

**Jeffrey** 48:58

Well, one of the biggest things for me was yoga. And by doing the yoga, I was able to physically, mentally and spiritually able to do something and learn how to do.

**Jeffrey's wife** 49:13

Yeah, I think especially recall of recent events, because he still might not remember the answer to a question a couple of minutes ago, but in terms of recalling what we just did and what we did yesterday, the day before, he is much, much clearer. And you know, he might not be able to say exactly which day but he, but he refers back to things totally clearly. And that's really helpful actually, in our daily lives. So, yeah, you know, and then of course, you know, and mostly at the positive tone, I know, he's aware that he has lost some facilities that that haven't come back, but that he and so sometimes that feels like attention to them, but then he finds ways to kind of go around it, which I like and say oh, I can still do this and that that's really helped.



**Nancy Lonsdorf**50:04

And this was as, as a physician, I just wanted to share this, it was it was a beautiful moment when he came to my office with his wife. And he said, You know, I told you, I was going to give you a copy of my book. So here's a copy of my book. And he had inscribed it. And he said, basically, thank you for the guidance to work with me this past year. Thank you for the right methods to break through the mental wall in my head. Only then was I able to reclaim the keys to momentum to open and reopen my heart and mind. Above all, you've guided me to cultivate the essence for body, mind, heart and soul. And he said that over here made the blessings of the blessing, beauty shine upon you. And he wrote a star and then with wonder and wellness, I thought it was just very beautiful, because he's a writer, and his wife was pretty impressed that this he had handwritten this. And it was all basically coherent, and also, of course, very heartfelt. And it was very fulfilling to see that he could express that through his art again, and his writing. So lastly, Harvey Cushing, who was a great physician from and spent time at Johns Hopkins, my alma mater, he said, a physician is obligated to consider more than a diseased organ, more even than the whole man, he must view the man in his world. So I love that quote, it really is about being comprehensive and holistic. And I wanted to say one last thing that I have had a number of my patients with neurological issues from probable mold exposure to kind of unknown reason why she had a head tremor, and they've been considerably helped with chiropractic. And it's been very helpful as an adjunct as well. So lastly, if you are interested in Ayurveda, [Ayurvedacourses.org](http://Ayurvedacourses.org). My website, you can take quizzes and get Ayurvedic tips. And Dr. Bredesen now has renamed his company, Apollo Health, and he does the training for his work.

**Marcus Chacos**52:27

Thank you very much, Dr. Nancy, the playbook those links are there as well, as well as the Amazon link to Dr. Nancy's books, has several links in there. I think in particular relevance, because I know there are so many of us practitioners that work with females and the cognitive decline to have that distinction around the Healthy Brain solution for women is imperative. And that's the first question I'm going to talk to you about, you spoke about, you've got the obviously the perimenopause and the postmenopausal woman, and you spoke about some of those, not just the changes, the signs and symptoms that happen, but also the fact that in impact their signs, signs and symptom changes, not just hot flashes, or hormone changes, but we also see those mood changes, those behavioral changes and even memory. So talking specifically to females at this point in time. And there is more I mean, everything from a brain health applies those lifestyle changes, look at exercise, improved diet, nutrition, take meditate, if we go into practices, you've spoken about those which are universally valuable, but allow us to go a little bit deeper and talk to the woman's brain to that distinction between what a male and a female are experiencing and are doing, so for the practitioners watching this, to be sensitive to those distinctions and be cognizant of the variances of approach that are going to be necessary.





**Nancy Lonsdorf**54:04

Yeah, I think that particularly in the perimenopausal time, you know, the hormonal shift that's going on in the body is a huge adjustment for the body to kind of adapt to. And it's a particularly critical time that if a woman is under too much stress, and she's shorting her sleep, like a lot of women who maybe they're in the sandwich generation, they've got kids at home, they've got aging parents plus now most of those women are working full time. It's really hard. I noticed that the highest proportion of the population who are having sleep problems and under sleeping are women in their 40s. So obviously that's a really bad combination because it's a time the body needs more rest and to handle stress better. And to make sure that the food is healthy and is brought, you know, taken in on time and lots of cooked vegetables. And those are all the things that you know, people who are super busy or overly busy, they, they're just not doing it. And that's going to compound all the perimenopausal issues. And I think it can lead women into really bad state of imbalance. And some of those women, you know, maybe they don't have a choice, they have to have that income or whatever it is, they many of them just can't really change their lifestyle dramatically at that time. So they might be the ones maybe they're helped by hormones. And I've seen some women get a lot of help from them. And I've also seen a lot of women take hormones at that time, and they still come to me and they say, look, I tried hormones, and I didn't get better, I got worse. I don't think that's the problem. And we, you know, we looked at it I Ayurvedically and said, You know, this is, you know, your system is clogged with all these impurities from the bad diet and not sleeping, and you just gotta drink lots of warm water, hot water is the Ayurvedic kind of cure all, and maybe some herbs, and you have to have a healthy meal in the middle of the day with lots of cooked vegetables and good balance of protein. And they do, they can, you know, we can make changes if we're really motivated. And it's kind of knowing what are the most important changes for that particular woman, and that, you know, she can focus on

**Marcus Chacos**56:36

I love that . I heard that term before, the the sandwich generation, I think you're right, a lot of cases that, and I love the principle of aging parents with kids, and they're torn between those dual responsibilities, they can always make the changes that we'd like them to make, because they are stretched, but that's why it's important that we have as practitioners one an awareness of these factors, how it's going to affect them neurological and behavioral health wise. And so sometimes it isn't about taking things out what's hanging on you, you can miss it, or even putting too much in, it's about saying where can we manage this process. And you know, giving the nootropics or something like that to help with that brain function, ensuring that they do get that sleep, making sure they're getting the care they need. And so we can support. So it doesn't compound, those hormonal issues. And I think when we realize this in the education that we deliver as the practitioner, highlighting the challenges that they are under your neurologically, and what this means in terms of a trajectory, we give them the opportunity to see the reality of

the circumstance and then motivate subtle changes accumulated beneficially over time to support you know, where they are on a continuum. So it doesn't end up in neurodegenerative changes, it really just is cognitive load that has the support, so it can be managed, and then over time first, while they're in this, you know, as you said, a transition or hormonal change period. And we need to have greater sensitivity awareness. And I think that's why I think your book is such an important resource because it's talking specifically to the health and brain solution of women in those transitional periods. Definitely was I probably that wasn't really a question that was just my breakthrough as you brought some of that together.

**Nancy Lonsdorf**58:27

Well, thank you, I actually really liked your point. And I wanted to just emphasize to all the practitioners, that you know, we can be pretty influential and not if we even say, you know, you just need to drink more water, just pure good to get a good spring water and drink, you know, throughout the day, that's going to help whatever musculoskeletal thing you come to me for or whatever the thing is, as well as you know, I read it says drink it warm or hot if you've got digestive problems like that lady who has was highlighted in that little vignette there that she has stomach pain and the gas and the bloating, constipation, hot water and warm cooked foods rather than raw are part of that Ayurvedic prescription So, so if we can just even help them, even just to encourage them, you know, you really need to make some changes. You know, when a doctor says that it can give them extra kind of permission, even especially women, because they're so used to at that age, just taking care of everyone else, and to be told that they really need to take care of themselves. It's permission and that's important.

**Marcus Chacos**59:35

It's an important conversation for every practitioner to have because as a male, I think I've seen enough in practice to know that the female takes a lot more, generally speaking, responsibilities for the family, for their aging family and for the children as well. And so they need to be given that support and that, you know, ability to demonstrate self-interest and move. The mother, the wife I just that place of lack of self-care because they care and want everyone else into a place of selfishness. But certainly there's almost always a selflessness about mothers and wives, and we need to move on from selflessness to self-interest, so they can take care of their family while simultaneously taking care of themselves. And I think what we're doing there is highlighting that important communication, the education that we can deliver, the role that we play, and the advice that we provide. I think, I love that. That's great. I do want to come back to this neurodegenerative continuum, I love that you said no one loses memory for no reason. And that is in contradiction to what has invariably been this cognitive decline is a natural and normal part of aging, to get, we have to anticipate or expect at some point, we're going to start to lose their ability to function mentally before with acuity. And yet that's not the case. And where people are on this neurodegenerative continuum from whether it's their peak performance, or the young



brain, to this point of what seems to be a non-recoverable position of advanced also be degenerative changes in Alzheimer's and other neurodegenerative conditions. But prior to that, we have this ability to improve or demonstrate reversal, when there is early cognitive impairment or decline, neurobehavioral disorders. From the nodes when there's early stage by systems biology changes, and metabolic disorders in your inflammation, all that is recoverable and reversible. So there's incredible hype. So what do you do on an education basis with your patients to be able to facilitate their willingness to embark upon a life change program, knowing that there is not an immediacy about there's no existing neurodegenerative break and orthology yet, this is the time to make that change, I'd love to hear your education process and your thinking, to shift people into taking personal responsibility now before it becomes problematic.

**Nancy Lonsdorf**1:02:07

Well, because I have a program for brain health, and you know, people find me they, if they are, most of them who come either they have a problem, or their spouse does, and this is bringing them. Or if they're cognitively intact themselves, they have most of them a parent, or both parents who declined or an older sibling, and they don't want to go that direction, or they may be noticed a little something they know is not as good. And so they come and they're ready. They, I mean, by the time they get to me through my scheduler, they know what the program is. And they're going to do this comprehensive blood test. And they're going to do the cognitive assessment and they know they're going to get a Maha lifestyle program, and they're ready for it or they wouldn't sign up. So I have that advantage of working with those people. And it's very, still very time intensive, but I, I allow three hours for the initial visit, because it takes that much. But for you all I will say that I have a colleague who in the chiropractic profession, who has been implementing Ayurveda, which is a totally, or almost all lifestyle, as well as some supplements. And I remember, she has told me that she inspired her patients just little by little like she would notice an imbalance or she'd take their pulse, which is an Ayurvedic technique. And she would notice some imbalance in this or that and she would just share with them, you know, I see that, you know, you complain of this pain, or you complain of this, whatever it is, I see also, from an Ayurvedic point of view that this is out of balance, maybe your body is out of balance, and you could benefit by doing an oil massage, you know, and you here's some oil, and here's how to do it, she'll give them one tip each, each time and next time, she'll say, Well, you know, all that ice water you're drinking, that's not helping with this Vata imbalance, you will need to drink warm drinks, you know, like chamomile tea and whatever. So, she will give them like one tip each time. So I think whatever is within your range, you know, you probably with almost every person if you if you ask a history, even on a form, it's a nice way to like, what do you eat each day for breakfast, lunch, dinner, how much exercise do you get? What do you do? When do you do it? What do you do go to bed, how many hours sleep you get if you just ask those questions, and you could have them fill out a form in the waiting room so you can see it all in like you know, 10



seconds, you know, where they need to do some changes, and then you can just inspire them with one or two tips

**Marcus Chacos**1:04:43

And testing. Again, thank you so much for your time. I really appreciate it. I want to bring this to conclusion with one last question. We began with that process of talking about the correlations of Alzheimer's with a number of different factors from infection to inflammation, viruses, your brand at all even genetic predisposition positions and all of those elements and then corrective mechanisms of you know, lifestyle change, diet, nutrition, supplementation, but ultimately, we need to get a clear picture of where they are, what is happening and what interventions again to be more effective. So I'd love for you to talk to the principal that neurodegeneration is a multifactorial element, we need to understand and assess that process. And the retake protocol that you utilize is an important part in assessing the overall state of health and well-being. And also, it gives guidance to the directions you might set up to talk about, and to the principle, the recall radio protocol for how to assist you in assessing the patient, educating the patient, directing their care and getting the outcomes.

**Nancy Lonsdorf**1:05:48

Yeah, I think the whole comprehensive blood test that you do in the beginning, that's a key element of it. And it helps to identify for each patient, what subtype they most likely are, like, if they have really good nutrition and all that, but their hscrp is high and their cholesterol is high, and maybe their oxidized cholesterol is high, and maybe their blood pressure is high. And when I take their Ayurvedic pulse, I see some markers of cardiovascular I go well, you know, we said they're probably this is vascular, because or it's a vascular and it's an insulin, you know, you have an inflammation, I mean, they overlap, right, because you can't just say somebody has vascular because vascular got that way usually through inflammation. And often diabetes is part of it. So you know, people are often in a variety of those types. But, you know, it pretty much gives you information that these are the one or two areas we really have to focus on are, you know, you change your diet, you're going to help inflammation and you're going to help the sugar. So, and hopefully, you'll help the vascular with time. So I think it gives you you know, you see and you know, Dr Bredesen has his training, plus, he has a kind of a set fee. And people can do the blood tests through his site, like, you know, arrange they have arrangements with certain labs, and they can go to that lab and get the panel for a certain set fee. I actually don't use that that much, because my patients want me to write their orders. So they can get as much paid through Medicare or, you know, National Health System is for older people. So but, you know, the recode is nice, because then it will give you a readout and you say, well, you're three plus in sugar problem, and you're only one plus in atrophic. And you're five plus in vascular. So, you know, it gives you the readings. But they're pretty clear once you've started to work with these, these values.



**Marcus Chacos**1:07:56

When you make the changes and the patient sees progress more we get the objective evidence of change but also that creates a wonderful feeling within the patient in terms of the effort that they have put into and the impact that it has and really creates a sustainability because of that process. So it was great to have this objective feedback, as well as symptomatic improvement. I think this is why as practitioners we have such an important role in both assessing, delivering recommendations and gaining feedback to those processes to reinforce those changes to the patient. So they become an ongoing part of the natural lifestyle. Awesome. Dr. Nancy. Appreciate. So those resources are available in the playbook. appreciate everything, was wonderful having you on. Thank you very much.

