

Welcome to the Cutting Edge Health Podcast with Jane Rogers, where we discuss science to help prevent cognitive decline.

**[00:00:00] Jane Rogers:** Welcome to the *Cutting-Edge Health Preventing Cognitive Decline* podcast. I'm Jane Rogers. Dr. Russell Jaffe is our guest today. He is an MD and a PhD. He's worked for the National Institutes for Health for 19 years and done many other things, been recognized internationally for his work in pathology and also as an internal medicine specialist. The thing I liked about this interview was how we dug deep into what we can do that's inexpensive to really change the trajectory of how well we age and how vibrant we remain mentally. I hope you enjoy this as much as I did. Dr. Russell Jaffe, thank you for being our guest. How are you today?

**[00:00:44] Russell Jaffe:** I'm quite okay. My life goes between good and pretty good, and it doesn't get much outside of that bandwidth. I don't want to be too exuberant. I can be, but I don't want to be, and I certainly don't want to be down, which is the way my family operates. I learned from my family what not to do, and now I do what I do.

**[00:01:10] Jane:** It served you well. Now, you have spent 40 years in practice, mostly in molecular biology, chemistry. You're trained as a pathologist, right?

**[00:01:21] Russell:** My initial training was in internal medicine at University Hospital in Boston under Norman Levinsky, a very famous internal medicine trainer. Then I matriculated to NIH where I did a residency in clinical pathology, got board certified, got subspecialty certified in chemical pathology, and stayed on the permanent senior staff. I left after 19 years, which is, by the way, a resignation from the public health service, not a retirement. Twenty years is a retirement. My father reminded me of that.

Since the early '80s, what I've been doing is cell cultures of human immune responsive lymphocyte white blood cells because our ex vivo...we do a test that in the laboratory reacts just as it does in the body. It's ex vivo, it's not in vitro, it's not a test for a test. It's a living cell culture that gives us T-cell information, immune complex information, B cell information, and we go past that. If you're willing to fill out a brief questionnaire about how you're feeling and functioning, we can recommend a six-month lifestyle epigenetic program to reverse inflammation, which is repair deficit, to reverse autoimmunity, which is a loss of tolerance, and to tune up your immune defense and repair system so that it can repair you, eliminate cancer cells, and renew your heart, vasculature, and all of you.

**[00:02:59] Jane:** Very important for this audience because what we're trying to do here is, as I'm sure you are too, stay cognitively vibrant as we age. All of those things that you touched on are really important for them. Which one do you want to unpack first?

**[00:03:13] Russell:** Let me start with this. If you look at statistics, you'll be a little bit concerned. The average, 80% of people are just surviving, they're getting by. They're doing the best they can. They're not really enjoying life. They're not doing what they love and loving what they do, most of the time. I want you to read a little book called *Thriving in the 21st Century*, which is our synthesis of how to fall back in love with nature, nurture, and wholeness, to do primary prevention, to use food as medicine, to stay well hydrated, to be active, appropriate for your condition and situation, and as someone who is currently functioning at half my chronological age.

I know my age. I look at my birth certificate or something like that, or my passport, and I know my age. By the predictive biomarker tests that cover all of lifestyle and epigenetics, I'm about 35 to 40.

**[00:04:32] Jane:** Now what test is that, Doctor?

**[00:04:34] Russell:** It's a combination of eight tests. We surveyed 100,000 tests to find out how could we cover all of lifestyle and epigenetics. Lifestyle and epigenetics are 92% of your lifetime health; 8% is transgenerational and genomic. That's not what we do. We do the 92% that's lifestyle and related to what you eat, drink, think, and do. I have never had a private practice. I've always trained doctors so that they could help their patients in this comprehensive, proactive way. I'm getting to the point, which is I have made a study of people who lived long, generally 100 to 110 years, and were fully functional cognitively, emotionally, spiritually, physically.

I had 30 years with a Cambodian Buddhist monk named Bhante Dhammawara, and we're doing a book about him because he is really so remarkable as an example of how to persevere and succeed. Many people give up for one reason or another, and I'm not judging. I'm just observing that perseverance furthers success. That's what it says in the *I Ching*, which is one of the three books of Chinese medicine. I did a seven-year apprenticeship in acupuncture and TCM with Quingwu. I'm cross-trained and eclectic.

**[00:06:11] Jane:** I'm gathering that. What are those pearls that you suggest so that we don't give up on life, and we can remain vibrant late into our years?

**[00:06:21] Russell:** Do the following simple things. Give up processed foods. Mostly eat whole foods you have prepared at home with better quality herbs and spices and organic or biodynamic because commercial will be full of harmful chemicals that will slowly wear you out and wear you down. If you follow our guidance, which we have in this book, *Thriving in the 21st Century*, and other books that we've written, and other little guides—we have free things you can download, for example, to know how to choose an alkaline-forming diet, because metabolically, your body and mine produce excess acid every day.

If we don't take in alkaline-forming foods and supplements, we will run down with metabolic acidosis, which is a major, major cause, and reversible, but a major cause of cognitive decline, Alzheimer's, and other mental impairments.

**[00:07:29] Jane:** An alkaline diet, does that mean a lot of veggies? How do you go about it?

**[00:07:34] Russell:** What it means, yes, you should download our Food Effects on Body Chemistry chart. It's been downloaded over a quarter of a million times. It's in the Natick Nutrition Guide because of my colleague at the Military Medical School. It's a very fundamental point of view about what effects food has on your body chemistry. This is an advance over the prior technology. You get that free, you download it, you look at it, either on a screen or print it out, and you eat 80% from the alkaline-forming side when you're recovering, and 60% from the alkaline-forming side when you're well and want to be well for a long time.

Correcting metabolic acidosis, which basically means lack of magnesium inside your cells. Magnesium is the mineral that balances calcium. We know about magnesium, but it has been very hard in the past to get enough magnesium into the cell to correct metabolic acidosis, to activate ATP, to activate the battery that produces the ATP called the mitochondria, to maintain the proton gradient, to activate many catalysts that only magnesium does, and to protect essential fats in transport, which magnesium does.

We have pioneered the tripling of the uptake of magnesium through the use of choline citrate. You take a little strip, pH strip, I should have it for the show and tell, but you take a pH strip after rest, six hours of rest or more is enough for the fluid in your bladder to equilibrate with the lining cells of your bladder and your GU tract. If you're okay and you need only two doses a day to meet daily needs of magnesium and choline citrate, you would have a pH between 6.5 and 7.5. Many, many people have a pH below 6.5, sometimes significantly below 6.5, and they need three, four, or five doses a day of magnesium plus choline citrate.

We have this available on YouTube. We have this available on [drrusseljaffe.com](http://drrusseljaffe.com). If you look up magnesium and Dr. Russel Jaffe, probably this will come up. In fact, it will come up because I want to confirm to people that there is something simple about a dollar a day, to use this little strip, pH strip, but a high sensitivity, contrast, color changing strip. If it's green, that's the Goldilocks scenario. That's where you want to be. If it's sandy colored or yellow, that's bad. If it's blue, that's another kind of bad. It's always the middle path. It's always Goldilocks. Just enough is just right.

Today, you have much more anti-nutrient, pro-oxidative, harmful chemicals in the environment and foods and beverages, so you need more antioxidant of nature's

ascorbate and related. You judge how much magnesium choline citrate based on the urine pH, and you judge the nature's ascorbate based on what we call the C-Cleanse.

**[00:10:52] Jane:** Magnesium, bulking up on magnesium.

**[00:10:55] Russell:** Yes, if you just take too much magnesium, because I'm going to get a little wonky now, of the dose that you take, one third comes in through the normal ion channel. That's called the calcium magnesium ATPase ion channel. The most you can get in is one third. That means two thirds will stay in your intestines. If that builds up, it will because hypermotility and diarrhea. What we did was combine magnesium with choline citrate and triple the uptake of magnesium. We've documented that in outcome studies. Yes, that's a wow.

**[00:11:33] Jane:** Because every time I test, I'm always low in magnesium, always.

**[00:11:38] Russell:** Almost everyone is. My colleague, Dr. Ron Elene, showed many, many years ago that you could use a simple serum test for magnesium. If you're in the lower half of the lab usual range for magnesium, you're deficient, chronically deficient. CLMD, Chronic Latent Magnesium Deficiency. He coined the term. Multiple studies have proven that he is correct. He and I actually studied together at NIH. I've known him a long time, and I respect him. He's a gentleman and a scientist. He has confirmed that our tripling the uptake of magnesium is a game changer.

**[00:12:23] Jane:** Okay. I get excited about this because a lot of the things that we talk about to promote cognitive health as we age, some of them can be pricey. This is not at all.

**[00:12:33] Russell:** Exactly right. I want to start by showing people there are simple self-assessments, including this urine pH and the C-cleanse and a hydration test. Even 1% or 2% or 3% dehydrated, which is very common. Many medicines induce dehydration. If you're dehydrated, that puts a terrible strain on your heart, your liver, your kidneys, your digestive tract, your brain. Hydrate, hydrate, hydrate. Be careful of what comes out of the tap because it might be gray water. It might not be drinkable water coming out of the tap.

You can test for a few dollars. I think it's about \$60 for a comprehensive water test of your tap water. We happen to have a well and our well goes to the third aquifer down, goes very far down. We get wonderful water coming out of our tap, but that's because it's from the well. If we were on city water or county water or commercial water, it would have too much aluminum, too much toxic metals, not enough magnesium, not enough of the good micro minerals. Be careful of the tap, but have lots of broths, have vegetable broths or the broth of your choice, but no bone broth.

**[00:14:01] Jane:** No bone broth, now why is that?

**[00:14:03] Russell:** Because bone broth is actually made from whatever is left when they've rendered the animal. Too much glutamate. Glutamate is a cause of excitoneurotoxin decline in the brain, no bone broth.

**[00:14:18] Jane:** I make chicken soup. I love my chicken soup. I make it with a whole chicken and organic chicken.

**[00:14:24] Russell:** I am releasing the fact that even organic chicken has micro plastic and harmful chemicals. What I recommend is you get a duck.

**[00:14:38] Jane:** Okay, all right.

**[00:14:40] Russell:** You get a duck and you make duck soup, rather than chicken soup.

**[00:14:45] Jane:** They have less?

**[00:14:46] Russell:** Ducks have not been manipulated. They are fed reasonably whole grain, especially if it's an organic or biodynamic duck, which is available. It should be humanely rendered and so forth, that's a given. Duck, goose, quail, yes. Chicken, chicken eggs, no. This is, I'm very sad to say this. I used to recommend organic or biodynamic and then I found out that most of the word organic, like the word natural, has only meaning in the marketing community. It has no scientific medical meaning anymore.

**[00:15:30] Jane:** We can't trust that right now.

**[00:15:32] Russell:** You can trust those of us who've been around long enough to tell you the truth. Generally, we will be involved with prevention, but we won't be just promoting a product.

**[00:15:47] Jane:** Tell me about the hydration test. How do I know if I'm dehydrated?

**[00:15:51] Russell:** This is the back of my hand. I'm now going to pinch the skin on the back of my hand. Notice that it went flat fairly quickly. That's the hydration test. Now we have this written up. You're pretty good.

**[00:16:05] Jane:** I'm not real good though. It's still sticking up.

**[00:16:08] Russell:** No. I was just going to say, you're a little bit dry. If you drank eight ounces of broth or electrolyte or something healthy or potency or something like that, and then retested in two hours, it would go flat quicker.

**[00:16:25] Jane:** Okay.

**[00:16:26] Russell:** As an added incentive, you don't have any wrinkles that I can see. Your skin will be more radiant if you're well hydrated.

**[00:16:38] Jane:** Now, there was one other test that you mentioned, the test with your urine, hydration test. What was the other third test?

**[00:16:46] Russell:** The C-Cleanse. How to know how much antioxidant, nature's ascorbate antioxidant, that counteracts the anti-nutrients and the oxidative chemicals that abound. Now, I want you to reduce the harm, but I also want you to enhance the ability to detoxify, especially using nature's ascorbate based on your C-Cleanse. How much ascorbate taken every 15 minutes does it take for you to have a very special kind of a poop?

**[00:17:20] Jane:** Okay.

**[00:17:21] Russell:** When you've done this, you will have no doubt that what I'm talking about is true. This is different than anything else, different than just diarrhea. What happens is when you take every 15 minutes enough ascorbate to activate your rectum, which is actually embryologically derived from your kidneys, this is an excretory part of the body that pumps toxins and fluid into the rectum, and then you whoosh, you flush. Now, you should be able to do a C-Cleanse within a couple of hours. Many people need much more ascorbate than they think, so they start by taking a little, and then after a couple of hours, they haven't had a flush.

I would stop. I'd come back next week. Generally, you do this on the weekend. You don't generally do this during the week. I would stop. I would wait a week. I would come back, but I'd now double or triple the amount of ascorbate I took every 15 minutes. Again, we have this all written up, free to download. The instructions about the C-Cleanse are very simple and clear. You take the amount you need of nature's ascorbate every 15 minutes until you have one of these cleanses. We used to call it the C-Flush, but more people will do a C-Cleanse than do a C-Flush.

**[00:18:51] Jane:** Then once you have that information, is that guiding you as to how much C you should be taking on a daily basis moving forward?

**[00:18:58] Russell:** Exactly. The amount that induces the cleanse, between half and three quarters of that, taken spread through the day. Many people get up in the morning, they take a jogger's bottle. They put however many grams of ascorbate they're going to sip on throughout the day, they fill it with healthy water, they put a top on it and they sip on it all day. That helps you hydrate and that helps you keep your antioxidant intake ahead of the pro-oxidative anti-nutrients.

**[00:19:33] Jane:** To switch gears just a little bit, you mentioned your expertise in T-cells. T-cells are very important and there was just a recent article about a breakthrough regarding T-cells and how they may help longevity, like killer T-cells. Tell us about that.

**[00:19:49] Russell:** The nomenclature is very simple. An acquaintance of mine, a mentor of mine, identified that there are different kinds of white blood cells called lymphocytes. There's a class called B-cells, which make antibodies. They can be helpful or harmful antibodies, so you have to have a cell culture that distinguishes helpful from harmful antibodies. Then there are immune complexes, which we might also want to talk about. Then, most importantly, and only available through cell culture, are the T-cell responses.

Now, there are different types of T-cells. There are helper T-cells. There are suppressor T-cells. There are counter-counter helper, counter-counter suppressor. It's a very elegant ballet that occurs in the human body and that we measure *ex vivo* just as it occurs in the human body. By cell culture, we have been measuring T-cell responses since 1983. We have done over 100,000 specimens. We've done 30 million cell cultures. We've published data on over 4,000 consecutive line split samples, which means different readers don't know that they're reading the same specimen, but then you compare the results afterwards.

We publish in the peer-reviewed literature to show the precision, the sensitivity, the specificity, the predictive index. We have done outcome studies, a study in fibromyalgia, a study in type 1 diabetes and type 2 diabetes, and diabetes is related to the brain. Actually, Alzheimer's is now considered to be type 3 diabetes, which means your hemoglobin A1c, which is one of those eight predictive biomarker tests, should be 5%.

**[00:21:46] Jane:** You want five?

**[00:21:47] Russell:** I want five. I know the commercial says you want to get down to seven. I'm telling you the difference between seven and five is dramatic in terms of quality of life. My hemoglobin A1C has been five since I lost the weight that I had gained over time. That was a decade or more ago. I've been at five. I measure every six months. You don't have to do it every week. About every six months is plenty. I can get you to five if you will follow my nature, nurture, and wholeness guidance.

**[00:22:25] Jane:** I'm at 5.4. I'd love to be at five. You don't have any sugar?

**[00:22:32] Russell:** No added sugar, no edible oils, no crisped or fried foods. We can show you how to be grain-free, edible oil-free, sugar-free, have lots of grasses, which are nutritious, delicious, induce a healthier microbiome and digestive tract because they're rich in fiber and nutrients. We recommend a wide variety of foods in a wide variety of ways. For example, one day a week have a multi-bean chili. One day a week have a

curry. One day a week have a lentil dal. One day a week have fungi and sea vegetables, seaweed.

One day a week follow our liquid nutrient plan to stay well hydrated while you rest and restore your digestion and microbiome. That's what we recommend. Now, for snacks: seeds, nuts, berries, whole food, whole fruit.

**[00:23:33] Jane:** Okay. Let's get back to T-cells. We diverted to the hemoglobin A1C, which is very important.

**[00:23:38] Russell:** Thank you for saying that. T-cells are so important and they're getting into the news and many, many studies. As I mentioned, we've been onto this since the early '80s.

**[00:23:50] Jane:** How can I enhance my T-cell function?

**[00:23:54] Russell:** Anything that improves your tolerance, and I mean immune defense and repair tolerance, will not only improve your T-cells, they will lengthen your telomeres. One of the markers of "aging," which is actually a marker of impairment, is shortening of telomeres in T-cells. My telomeres have been getting longer.

**[00:24:19] Jane:** How have you been doing that?

**[00:24:21] Russell:** The same way my dad did it because at 90, his telomeres were that of a 40-year-old and he thought that was pretty good. My main teacher, Bhante Damawara, was 106 when we measured him last. He lasted until 110, but at 106, he had long telomeres and his predictive biomarkers said that he was functioning like a 40-year-old. He thought that was a good age.

**[00:24:48] Jane:** Is that just genetics? Do you just have long telomeres in your family?

**[00:24:53] Russell:** No. Your telomeres respond to your lifestyle and epigenetics. They are very little related to mom and dad. There are transgenerational influences, which have to do with habits of living that influence that 8% that is genetic and genomic. Then, of course, there is DNA. The best way to protect your DNA is to have what we recommend in antioxidants, buffering minerals, essential nutrients, and avoiding the toxins of our time as much as possible. You can reduce by 80% the harm that comes into you.

For example, have outdoor clothes and shoes and indoor clothes and shoes. That simple thing. You'd be surprised how much toxin you bring in on your clothes. I have outdoor clothes and I have indoor clothes. I have outdoor shoes and indoor shoes. Dramatic. In some cultures, you don't wear shoes inside. You leave your shoes at the door and you

put on slippers or something like that, in some cultures. That's one simple thing that anyone can do to cut down on the harm that comes into their environment.

**[00:26:11] Jane:** That's fabulous.

**[00:26:12] Russell:** Then know that indoor air is worse for your T-cells than outdoor air. Get out, take a walk, preferably in a park or a glade or a floodplain or somewhere where nature can nurture you, where you can ramble and amble. Don't speed walk. You can if you want, but I really want you to go out and discover that nature is remarkable. I observe moss on our brick path, many different kinds of moss. I'm enthralled. I don't know much about them. I'm sure someone would know a lot more than I.

Just the visual pleasure of being mobile, and by the way, we have had a very successful video on why I am walking upright now and why I was beginning to tilt forward, which meant I was really falling into walking, which increases the chances of your falling. With the help of Roger Tolo and Traeger Techniques, I am now more upright. I walk very differently. I'm glad to tell you at "my age," learning to walk again has been a pleasure. We should get back to T-cells because they really are so important in the immune response.

When you're tolerant, your T-cells are able to defend and repair you. When you have food and chemical sensitivities, your immune system, your immune defense and repair system, your T-cells may be on defense so much that they don't repair you and you end up with inflammation, which is really repair deficit. T-cell responses are very important and we get very personal and specific about which foods, chemicals, medications, substances, dander/hair/feathers could be inducing a problem for your immune defense and repair system and your T-cells.

**[00:28:28] Jane:** How can I tell if I am surrounded by things that are triggering me?

**[00:28:33] Russell:** One of the eight predictive biomarkers is called the LRA, the Lymphocyte Response Assay that we pioneered in 1983. You can send in a one-ounce blood specimen. You have to prepare properly because these are live cells and we want to get a live response from your cells in our laboratory. You have the LRA, the Lymphocyte Response Assay test. You can have it through a health professional or you can have it through a consumer platform called BetterLabTestsNow.com. The test comes back with recommendations of a lifestyle program to improve your feeling and function.

How you are feeling and how you are functioning should improve based on the recommendations that we specifically make based on all of these studies that we've done, all the synthesis of data that we've done. Because if I tell you that rutabaga causes immune defense and repair problems, that's pretty easy to avoid rutabaga. If it's a part of your cosmetics or your personal care, you need to be informed about the low toxicity

version of that. For example, we have put out a blog on the fact that toothpaste commonly has glyphosate, microplastic, and other hormone-disrupting chemicals in it, and there are toothpastes that don't.

Then there's mouthwash. The best mouthwash turns out to be Nature's Ascorbate. I could go on because these exposures to anti-nutrients and hormone-disrupting forever molecules are everywhere. You have to be informed about how to avoid them.

**[00:30:23] Jane:** What other pearls do you have? You mentioned you really wanted to talk about the immune system.

**[00:30:29] Russell:** I want to put the immune system in the place that it deserves. There are neurohormones. They're important. Your immune defense and repair system is responsible for doing defense against foreign invaders. You want to reduce the number of harmful chemicals and foreign invaders that are coming in. You want to know what you're reacting to so you can reduce the exposure to the extent that you can, which is at least 80%. Then you want to enhance your detoxification system so that the other 20% can get converted into less toxic, more water-soluble molecules for excretion through urine, sweat, and stool.

Your digestive transit time turns out to be very important. A digestive transit time that's healthy is 12 to 18 hours. What you have for dinner should come out in the morning. The average American, it's three to seven days. That's plenty of time for maldigestion, dysbiosis, enteropathy, and other harmful things to happen on the way out.

**[00:31:34] Jane:** How does one speed their transit time?

**[00:31:36] Russell:** This I learned from Dr. Dennis Burkett. You need prebiotics, you need probiotics, you need symbiotics, and then you need stomach stimulants, stomach repair. You have prebiotics. You take fiber, 40 to 100 grams a day.

**[00:31:52] Jane:** That's a lot.

**[00:31:53] Russell:** The average American gets 7 to 10 and has an increase in everything from colon cancer to irritable bowel syndrome to senility. You take 40 to 100 grams of fiber. We recommend diet, take a high fiber diet, you'll get about 20 grams. You might take another 20 or so grams from a supplement that we make of raw, unprocessed fiber. To nourish your microbiome, you should have tens of thousands of different organisms that are nourished by the fiber in your diet. Then you have probiotics, live, healthy bugs.

We recommend 10 different strains of acidophilus, bifidus, and streptomophilus, but they should be alive. Most probiotics are dead. They are particles that you can measure as particles, but if you ask what's the CFU, what's the colony forming unit? How alive is it?

Can you make yogurt and kefir out of it? The answer is yes with ours, no with most. Then symbiotics. It turns out that the lining cells of your intestine respond only to glutamine as an energy source. If you take too much glutamine, it could convert into glutamate, which would become an excitoneurotoxin.

We have figured out how to recycle the glutamine 10 times using PAK, Pyridoxal Alpha-Ketoglutarate. Now you get the benefit of the energy without ever building up glutamate. You take three capsules on rising, three capsules before bed and you get plenty of glutamine to nourish your enterocytes or your lining of your intestine cells, which are very important for keeping the bad stuff out and getting the good stuff in. Those are some of the pearls.

**[00:33:56] Jane:** Thank you. Thank you very much. You have mentioned a number of times, we, and referring us to different videos. I just want to make sure folks know where to go to get more information.

**[00:34:07] Russell:** We have a website called [drrusseljaffe.com](http://drrusseljaffe.com). We post blogs for consumers and for professionals there. We have available things to download for free like we've been talking about. My recommendation would be to go to [drrusseljaffe.com](http://drrusseljaffe.com), but also remember that there's a YouTube channel called Dr. Russell Jaffe. We have almost a thousand videos of one sort or another on something where we're telling you the truth about everything from walking and salt to hydration and environment because someone's got to tell the truth.

Someone, you asked who the we is. We as Health Studies Collegium, we have a foundation that was now 35 years old. It has a small group of fellows of which I'm a founding member. We have long been on the proactive, predictive, preventive, primary prevention practice and protocol bandwagon. We see this as a way of saving over a million lives a year, saving a trillion dollars to add back to the US economy. In regard to the economy as a whole, if you saved a million lives, you would add \$8 trillion to the national wealth of our country and you would over time save Medicare and Medicaid.

We are advocates for proactive prevention. You can save your life. You can add life to years and years to life by following this guidance, or something similar. There are many fine people, Dr. Dean Ornish, Dr. Andy Weil and many, many colleagues and friends of mine that will tell you what they believe to be the truth. We do the same. I am a consumer. I am also a physician and a scientist, but my children, my parents, my friends have benefited from these approaches. I would like everyone to benefit in the same way.

It doesn't take a lot of money. It does take a makeover in your kitchen, your personal care, your bedroom, and your relationships, because relationship is very important. It's so important. To have nurturing relationships that bring you smiles, laughs and joy, because smiling turns out to give out helpful neurochemicals, and frowning does the opposite.



**[00:37:03] Jane:** May you continue for the rest of today to smile and have good neurochemicals. Dr. Jaffe, I just appreciate your time very much. Thank you

**[00:37:11] Russell:** Thanks for having me. Thanks for doing what you're doing.

**[00:37:15] Jane:** I love it.

**[00:37:16] Russell:** Everyone needs to hear this message.

**[00:37:19] Jane:** I agree. You take care. You've been listening to the *Cutting Edge Health Preventing Cognitive Decline* podcast. Any information shared here is for educational purposes only. Guest opinions are their own. This podcast is not responsible for the veracity of their statements. Do not use any of this information without first talking to your doctor. Cutting Edge Health LLC is not responsible for what may happen to you if you use their information in place of official advice from a medical professional. Thanks for listening. Be well.

**[00:37:58] [END OF AUDIO]**

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