

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

Jane Rogers: We keep hearing how diet is critical to the health of your brain and your body, but we haven't devoted an entire episode to what we should be eating. Today we explore that. We dive deep with one of our regular guests, functional medicine doc, Dr. Lisa Broyles. She weaves tips from the founder of functional medicine, Dr. Mark Hyman's latest book, *The Pegan Diet*, with her own dietary advice. There are nuggets in this interview for even the person who thinks they are diet-savvy already. Welcome back, Dr. Broyles. How are you today?

Dr. Lisa Broyles: Doing great. Thank you for inviting me back.

Jane: You're welcome. Tell me about this book you were very excited about. We know diet is super important as the foundation for our health and our cognitive health. You got very excited about *The Pegan Diet*.

Dr. Lisa Broyles: I did. I think that there's lots of diets and there's lots of fads out there. *The Pegan Diet* is Dr. Mark Hyman's attempt to say, hey, this isn't a diet, this isn't a fad. These are some simple strategies that everybody can follow, and yes, we should personalize individually the little key points here and there. There are just some basic healthy smart pointers that I think are absolutely critical. If you are trying to keep your brain healthy, you have got to feed it the right food. Thank you for taking the time today to really dive into this with me.

Jane: Okay. We got a lot to cover. Let's start with just food. He outlines seven principles to talk about when you come to food. One is rainbow foods.

Dr. Lisa Broyles: It's interesting that the color of your food can actually help you know what that food is going to do for your body. If you look at your plate and it's all white and yellow and gray, you probably shouldn't be eating anything on it. You want to eat foods-- The deeper the color of your food, the better it is for you. He talks about how foods that are red are anti-inflammatory and they help your immune system. Foods that are blue improve your memory and help with depression and anxiety. Things like plums, eggplants, and blueberries.

You think the brain helps when you see blue and purple. If it's green, it's going to help with circulation. If it's yellow, that food is probably going to help you with your gut. If it's orange, it helps with your hormone regulation. It's amazing how the color of the food actually tells you what it's going to do for your body.

Jane: That's incredible. Moving from the brightly colored fruits and vegetables to whole grains.

Dr. Lisa Broyles: This book blew my mind in the whole grains chapter because when I think of whole grains, I think of a healthy bread with lots of seeds tucked into it. He actually says whole grains are not anything made from flour. That was just a lightning bolt moment for me of, oh my gosh, whole grains actually mean the whole kernel. When he talks about eating a small amount of healthy whole grains, he means whole kernel, like brown rice, black rice, purple rice, which he calls the blueberry of the grains world. They're chock-full of phytonutrients and antioxidants for your health.

You also should be eating things like quinoa, buckwheats. If you see, the theme here is the whole kernel. You should really limit anything made from flour as much as possible because that's driving insulin resistance, elevated blood sugar, diabetes across the world.

Jane: I know about white rice and brown rice. Purple rice was new to me.

Dr. Lisa Broyles: I know. It's delicious, too. It has a nuttier flavor. Purple rice and black rice, they were called forbidden rice or the emperor's rice, because they were for the nobility. This is the king of rice as far as nutrition goes. I love to cook some chicken and have some black rice or purple rice with it. I just love the nutty flavor of it.

Jane: Great. I'm on it. Meat, smart choices.

Dr. Lisa Broyles: Meat can be good for you. There's been some new studies that discovered that meat actually has phytochemicals in it. We didn't know this. We knew that there were phytochemicals, which by the way, are your cancer-fighting compounds that are in fruits and vegetables. We knew that they were in fruits and vegetables and whole grains. We didn't know that free-range meat actually has phytochemicals in them. Studies have shown that if you eat a goat that has free-range in a pasture versus a cow that has been raised in a feedlot, that your meat is chock-full of phytonutrients like crocetin.

Right now with COVID, everybody's heard the word crocetin because it's an incredible herbal anti-inflammatory, antihistamine. Crocetin is super good for you. It's in the meat from free-range goats. Meat can be nutritious if you source it correctly. You're trying to get it from animals that have not been raised in feedlots where they're fed junk like candy and genetically modified corn full of Roundup.

You have to realize that you are not only what you eat, but you are what your food ate. If that burger that you're eating was from a feedlot, and that cow was stuck in that pasture and never allowed to graze on real grass, then it's going to be chock-full of the wrong kind of fats and it's not going to have any of the nutritious vitamins and minerals that your body needs to absorb.

The other thing with meat is all about how you cook it. You should cook meat at low temperatures. It's better to bake, to roast, poach than it is to fry and to grill. The other thing is, cook your meat with things like red wine, olive oil, herbs and spices. Studies have shown that when you cook meat with these other phytonutrients, you're actually decreasing the oxidative stress on your body from consuming that meat.

Jane: It also tastes better when you have grass-fed.

Dr. Lisa Broyles: Absolutely. I think so.

Jane: You can really tell.

Dr. Lisa Broyles: Yes. The healthy quality of the fat from a free-range animal, first of all, there is less of the fat, but that fat has more omega-3s and less omega-6s, which is what your brain and your hormones need to be healthy.

Jane: Poultry eggs. It's confusing because you've got free-range and you've got--

Dr. Lisa Broyles: Yes, let's talk about that for a minute. I am a chicken farmer myself. I have all kinds of chickens and I love my chickens. I have to say, when I see in the grocery store that the little carton says vegetarian-fed hens, it breaks my heart for those little chickens because chickens love bugs and they love worms. If those chickens are free-range, they should go around pecking up little bugs in the soil. The best way to control ticks and spiders in your garden is to have chickens. If a chicken has been vegetarian-fed, that means that it's not a free-range chicken and it was primarily fed junk like corn.

Stay away from any egg cartons that say vegetarian-fed hens. You should be looking for free-range hens that are allowed to go around and graze and eat all the-- My chickens, when they see me, they come running and they always expect a handout. Not only do I give them my leftover kitchen scraps, but I give them a multi-mix of healthy kinds of seeds. I let them free-range all over my yard, which does result in chicken poop in places where you don't want it, but it's worth it when I eat those eggs. The same thing is true for the chicken itself and the meat from that chicken.

Chickens that are fed just grain in the chicken feedlots, if you will, those big cages that they never see the light of day, that meat is much higher in arsenic. It's because they are fed arsenic in their food. The problem with that is, we think, oh, that's a safe form of arsenic that we're giving the chicken, but the chicken's body converts it to an inflammatory bad for us kind of arsenic when it comes to human consumption.

Jane: I must say as an aside, your eggs are the best I've ever had.

Dr. Lisa Broyles: Yay. Thank you.

Jane: They just jump off my plate. They are so fresh. It's just--

Dr. Lisa Broyles: My husband eats probably about six of them every day. He has the best HDL cholesterol that I have ever seen in a man. I think it's because the yolk for our free-range eggs is so rich in the right kind of fats. He's getting the good stuff.

Jane: Speaking of fats, fats are important.

Dr. Lisa Broyles: Fats are important. Did you know that our brain is primarily made of fat? Fats have been vilified for so long. It's really about choosing the right kind of fat. Our hormones are made of fat. Our cell lining, called the lipid coating, is made of fat. The way that all the cells in your body communicate and talk to each other, is when these little fat membranes communicate and talk to each other. Your body is going to incorporate whatever fats you are consuming into that lipid coating. It's going to coat your neurons in your brain, it's going to make your hormones out of it, so you want to choose the right kinds of fats.

What I mean by that is olives. Olive oil, coconuts, avocados, nuts. These are healthy fats. Animal fat in a free-range animal is also safe. I will say one caveat. If you have a gene called the APOE e4 gene, which I know we've discussed in some of our podcasts, but this is an important gene, that if you have the APOE e4, it increases your risk, not only of Alzheimer's, but of inflammation. People with APOE e4 gene in general, don't do well with much saturated fat. They should follow less saturated fat in their diet than those that don't have the APOE e4 gene.

If you don't know if you have it, talk to a functional medicine doctor, talk to me, we can get you tested then find out. It's not that you can't have saturated fat if you have the APOE e4, you just need to use smart choices for it and eat less of it.

Jane: That involves dairy, too. Someone with the APOE e4, like I have, I shouldn't be eating full-fat dairy, whole milk-

Dr. Lisa Broyles: Right.

Jane: -yogurt that's full-fat.

Dr. Lisa Broyles: Healthy dairy would be from sheep. Cheese made from sheep is okay. Goat cheese is also good for us as well. Most of our American cows produce a casing called A1, which unfortunately is pro-inflammatory, worsens acne, worsens allergies, not as digestible, whereas A2 cows have more of the low inflammation, good for you, if you will, casing. Of course, if you're lactose intolerant, it doesn't really matter what kind of A1 or A2 milk you're drinking. You shouldn't be drinking it. However, if you're not lactose intolerant, again, if you drink small amounts of A2, or instead of

butter, you use gee, which has had the lactose cooked out of it, or you're using goat or sheep, those are all better, safer choices of dairy.

The calcium in dairy, I know that the mass marketing says milk does the body good, but the truth is that the calcium that your bones are made of is primarily calcium hydroxyapatite. You get that mostly from hail, cabbage, sesame seeds, sardines, and chia seeds. You can absorb the calcium from these foods much better than you can from cow's milk.

Jane: Very important, especially for women. Pros and cons of being vegan or vegetarian.

Dr. Lisa Broyles: I think this is important.

Jane: That's a big one.

Dr. Lisa Broyles: I have some friends that are vegan. I tried going vegan in college. I found after eight months, I was severely anemic. Unfortunately, if you are a vegan, you are going to run the risk of being deficient in zinc, iodine, vitamin D and B12. Did I mention iron? You may have to take a supplement for some of these minerals and nutrients that you're lacking in your diet.

The other important thing, if you are a vegan, is make sure you are getting protein, especially for muscle building. You really need protein. Safe sources for a vegan would be pumpkin or pea or hemp protein and making protein shakes. You do have to make an extra effort to get enough of the right form of protein. A lot of vegans tend to eat a lot of carbohydrates. They eat a ton of bread because that's convenient, breads, cracker, cereals, which are all just driving up their insulin levels. It actually is making more of the vegans pre-diabetic and even diabetic because they're not eating enough of the vegetables and they're eating too many carbs.

It is possible to be a vegan and do it in a way that's healthy for you, but you do have to push the protein and you may have to supplement some of those minerals.

Jane: Let's switch to another part of the book. That's behavior. There are 10 different things that I know you'd like to talk about when it comes to behavior and food. The first one is the 75% rule. What is that?

Dr. Lisa Broyles: Dr. Hyman's 75% rule is that, when you look at your plate, he tries to incorporate three vegetables with each meal, if possible. Your meat should be your side dish, not the star of the show. When he says 75%, he means that, of the vegetables on your plate, 75% of those vegetables should be non-starchy. Starchy vegetables are most of what Americans think of when they think of a vegetable, which is potatoes, corn, and some squashes. Unfortunately, those starchy ones, too, can drive up insulin levels

and increase your risk of diabetes. Ideally, you should be having 75% of your vegetables being your leafy greens, your carrots, your non-starchy vegetables, your broccoli, your Brussels sprouts.

Jane: What is eat regeneration?

Dr. Lisa Broyles: Dr. Hyman had some really interesting talks in his book about regenerative farming, regenerative ecosystems. He's talking about how we're all worried about greenhouse gasses and carbon dioxide emissions. The truth is, feedlots produce all the fertilizer that goes into the way that we're currently farming. These huge feedlots of animals, they're producing tons and tons of junk fertilizer, which is then ruining the soil around them and running off into our rivers and streams and killing our fish and our shellfish that are important.

He's saying that the nitrous oxide that is produced from poor farming practices actually has a much higher content of greenhouse gasses than carbon dioxide. He's saying, reward the farmers that are farming responsibly, and when they rearrange their animals, they use the manure from those animals in their own farm. I have a mini-version of this here at my house. I try to homestead. I have a llama and goats. That llama poop, I call them llama berries. I just spent this past weekend, I've got blisters on my hands because I was scooping up mound after mound of llama poop. Then I took it and I sprinkled it all over my garden and my husband tilled it into the soil.

Then I also take the llama berries and I sprinkle them all around the bases of my fruit trees and even my flowers. My husband just love them. Then in the spring, all those little berries are slowly absorbed into the soil. I've been able to use my compost responsibly. Every time I see my llama out there producing more berries, I just get so excited because every four months, I can run out and grab it and use it to fertilize my garden and my vegetables.

I just love spring here because my flowers are so happy. If you can reuse it. Everything that we don't use in our kitchen is either eaten by my pig, or my goats, or my chickens. You can responsibly reuse and recycle. If we did that on a macro level, we would reduce the amount of greenhouse gasses as a planet.

Jane: You are inspiring me. I want a llama and chickens.

Dr. Lisa Broyles: Well, they spit, so beware. I have to make sure I don't look her in the eye when I feed her or I get a face full of very nasty tasting goo.

Jane: You don't bite the hand that feeds you. She spits the hand that feeds you, that's not good.

Dr. Lisa Broyles: She doesn't like men. There you go.

Jane: Really?

Dr. Lisa Broyles: Yes.

Jane: Okay. Dr. Hyman does not like sugar. What are his reasons?

Dr. Lisa Broyles: He talked a little bit about high-fructose corn syrup, which is a chemical. It's artificially made. You should always check your labels for high-fructose corn syrup. It is the number one reason why children are developing fatty liver. It's absolutely terrible. It increases fatty liver in American adults as well. High-fructose corn syrup is extremely addictive. It makes your brain crave it. All soda products, no matter what it is, Pepsi, Coke, pick your poison, all of these soda products have high-fructose corn syrup. Even a lot of bread on the shelves, ice cream.

Check your labels to make sure there is no high-fructose corn syrup, but even other alternatives. White sugar is still bad for you. It drives up your blood sugar and then it makes it crash. Then you get lightheaded and grumpy and then you reach for more sugar to try to get your energy back up. It leaves you on an emotional and a physical roller coaster. Plus, it drives obesity, which here in America, with our sad American diet, we are addicted to sugar.

If you can start your children off young and not give them a lot of sugar, hopefully they will not have as much of a craving for it when they're older. I get so many adults that come to me and they say, "I absolutely crave sugar. I want to eat right. When it comes to that late-night ice cream, I just can't get away from it." I would encourage them to try something like a handful of blueberries instead of reaching for the ice cream because your blueberries are going to lower your cortisol levels while you're sleeping and hopefully get your mood better because they're blue.

Jane: I've found with sugar, I've been addicted to sugar too. I find, though, after I've gone off of it for a number of days, like four or five days, my craving starts to diminish. Then after two weeks, I don't crave it anymore at all. I didn't think it was possible.

Dr. Lisa Broyles: Yes. Any habit can change, and cravings will change after two weeks. That's true for any craving, whether it's nicotine, or sugar, or alcohol, two weeks without it and your brain resets. Then you'll find that foods that didn't taste sweet or even tasted bitter to you before now taste sweet. My husband the other night made this delicious kohlrabi recipe. I had no idea that kohlrabi could actually be sweet. That's a vegetable, like broccoli. It was absolutely delicious. You have to get away from sugar. Unfortunately, bread converts to sugar. You end up, even if you say, well, I don't like cake, but I'll eat this bagel, it's really the same thing because that bagel is converting to sugar in your body.

Jane: We're talking about things that we shouldn't have, such as chocolate and caffeine. Caffeine is in chocolate. I'm so crazy about chocolate. This is not good, is it?

Dr. Lisa Broyles: Again, this form of chocolate is important here. If you're eating a dark chocolate that's around 80% or higher, there is actually some nutritional value in that chocolate. It has magnesium and it has iron. For women, that can be important. I do have some very dark chocolate once a month that I happen to crave, and we'll have a little square of it. It's all about how much chocolate and how often you eat it, and what form. Just good old milk chocolate has way too much sugar and milk, and you should really, ideally avoid that.

We're trying to be realistic here at the same time. Sugar, alcohol and caffeine, you could call them crutches even for our mood. A lot of us come home from work and we crave something to help us unwind. I would encourage you to make some green tea, which is going to help your body fight cancer. If you're a cancer survivor, it improves your body's ability to fight off cancer cells and decreases your risk of your cancer coming back. It's all about choosing the right choices.

One cup of caffeine isn't going to hurt you. Three cups of caffeine is going to stress your adrenal glands, increase your cortisol production, make your heart jittery, increase your risk of heart arrhythmias, not to mention the effects on the bowels. It's all about moderation.

Jane: Good advice. We all know about different diets. There's so many of them out there. What Dr. Hyman is saying is that you really need to custom-fit the diet for you. Everybody's body is different.

Dr. Lisa Broyles: He stresses these basic principles that are wise for most of us to follow, but he encourages you to find a functional medicine practitioner that will actually do genetic testing and nutritional testing to see, hey, what are your personal nutritional deficiencies that we can shore up, and what foods can we recommend? There's tons of saliva tests out there. I use one called Nutrition Genome for my patients, where they are sent a saliva kit, and that takes about a month to come back. When it does, it gives us all the genetic information for that individual that says, hey, according to your genes, you should avoid, say, beef or milk, but you should eat-- it actually lists specific foods that genetically are good for you, salmon or sweet potatoes.

It individualizes it for you according to your genetic makeup. I have had so many patients that come to me and say, "Doc, what diet should I be on?" Some patients absolutely thrive on a vegetarian diet and others on a carnivore diet, and so you can't say one size fits all when it comes to diet. I highly, highly recommend personalized nutrition through a functional medicine trained practitioner.

Jane: Very smart. Detoxification, this is also a big topic.

Dr. Lisa Broyles: It really is. There's lots of ways to detox. My family does a two-week liver cleanse, and I involve my children. They moan and groan, but they like it at the same time. Your liver is your most important detox organ. Dr. Hyman just briefly touches on making sure that you have some strategies. Not only should you once or twice a year be doing something like a liver cleanse, gallbladder cleanse, colon hydrotherapy, but you should also just on a day-to-day diet, try to do things that improve your body's ability to detox. For example, since your liver is your primary detox organ, every day that you drink alcohol or you take Tylenol, your liver cannot detox.

It's the same thing as if you took the trash out of your trash can, tied the baggie up, and stuck it right next to your trash can instead of taking it outside. Well, it's going to start to stink, and it's still in your body. Your liver just freezes when it comes to its ability to detox. My personal rule is, no more alcohol than a drink two days a week. That gives my body five days of the week to detox, to get rid of any accidental plastics or chemicals that I might have inhaled or applied or ingested through my foods. If you have chronic pain and you're taking Tylenol every single day, again, you are inhibiting your body's ability to detox.

The other important thing is to eat within a window. Especially if you have prediabetes, insulin resistance or diabetes, you really should stick to eating between an 8 to 10-hour window of the day. You eat an early dinner, say by 6:00 PM, and then you don't eat breakfast until around 8:00 AM the next morning. That's like 14, even better, 10:00 AM, that gives you 16 hours where there is no food coming in.

That also helps something called the migrating motor complex, the MMC, which in your gut helps peristalsis. It helps food move through, it helps bacteria move through. Decreases the risk of you developing an irritable bowel when your gut has that chance to rest and flush at night. That's another strategy for detox. There's lots of others. There's lots of cleanses on the market. Some general rule of thumb for eating organic and free-range is also going to help you because there's going to be less that you'll need to detox when the time comes.

Jane: When we talk about eating organic, eating free-range, I think a lot of people, including myself, think, "Oh boy, this is going to be expensive. Can I handle this? Can my budget handle it?" Dr. Hyman has some tips to give us that we can save money.

Dr. Lisa Broyles: Yes, he does. I hear that from a lot of people, "Well, I can't afford to eat organic." While it's true that eating everything organic can get expensive, there are certain foods that it's important. You can Google the top dirty dozen foods that you really should eat organic like apples. My daughter eats like five apples a day, so I really have to make sure that that kid gets organic apples. She loves honey crisp. God forbid if

there's no honey crisp apples in the grocery store that aren't organic because that's what I have time for her.

You really need to make sure that you are choosing organic products, but you have to think in advance. If you don't plan, then you're going to fail. You have to plan ahead. Sit down the weekend before and make a menu of, hey, these are the foods that I want to fix, therefore, this is what I'm going to shop for. The worst is when you're really hungry, you're just going to reach for the closest thing, and that's usually something like a frozen pizza or a box of macaroni and cheese, when really, if you had planned ahead, prepare some meals on the weekend that then you can use as leftovers through the week. Freeze some portions if you want to.

I think the trick to eating healthy, go to places like Aldi and Lidl. There's grocery stores that are discount grocery stores that still offer healthy food at a discount. You may have to go a little bit further to find it. You may have to plan in advance, but it is possible to do it cheaply. You can also join a CSA, a local community agriculture program or a farm, or do a cow share, where you go in with another family or two and you purchase a cow or a pig, so make sure you have a deep freezer

Jane: And get your family involved. This is not something that just falls on the parents.

Dr. Lisa Broyles: I guess it has to be one of my pet peeves. You really need to make your children eat what you eat. Hopefully, what you're eating is healthy, but don't give in to just letting your children snack on cereal, popcorn, and junk food because that's going to start a poor microbiome for that child. That's going to affect their attention, their mood, and their future gut health and their future allergies.

Best thing to do is, when your child is an infant, try to prepare your own baby foods. I did this with child number two, where I bought organic non-GMO soy milk and tofu, and I blended that in with frozen organic vegetables like peas, green beans. Introduce all of the vegetables to your baby before you ever let them try anything sweet. Make sure that they have got a taste for those vegetables before you go to the sweet stuff, and that's a really good start. Our children are fed the same thing as we are, and then those children will start to enjoy it. Include your children. Offer to cook with them. Get them a chef hat and a personalized apron and make cooking fun for them. They will grow to love shopping for food and cooking healthy foods with you.

Jane: That leads right into cooking. I like to eat out, but I find I don't eat out very much because I don't trust exactly what I'm getting. I don't know where the food is sourced. I want to cook it at home and trust that it's okay.

Dr. Lisa Broyles: Unfortunately, it really is important. I don't really enjoy cooking for the sake of cooking. If we're going to be honest here, I do enjoy eating tasty food. I want it

to be healthy for me, but I also don't want to spend hours and hours in the kitchen. I know a lot of us are busy in work and don't have that time too. There are companies that offer nutritious food already prepared like Blue Apron that you can subscribe to, where the healthy food comes to your home and you can cook it a little bit easier, a little more streamlined.

I actually just got a pre-prepared meal that I found at the grocery store the other day that I tried out on my children last night. My husband and I checked all the ingredients, and it all looked good and everybody agreed it was great. It took me 10 minutes. It is possible to eat healthy and do it in a short amount of time. Cooking in advance is good. I love my crockpot. If you can put something in at 10:00 or 11:00. We've started doing braised dishes, where we put meat in at 2:00 or 3:00 in the afternoon, and you just stick it in the oven and then you go pick up your kids from school and you do homework. Your meat dish with your vegetables is just cooking away.

I've got some wonderful African tagine recipes that I've been able to make. Braising is a great way to put it in advance, and a few hours later, you have a delicious, nutritious meal for your family.

Jane: Do you do an instant pot? I do, and I love it. It's just quick.

Dr. Lisa Broyles: I bought one for my mom, and I kept meaning to buy myself one. I have heard good things about them.

Jane: You can borrow mine to check it out. I really like it because I don't like to spend a ton of time in the kitchen either. This is not just a fad diet at all. This is something that becomes your lifestyle.

Dr. Lisa Broyles: You have to think about these principles. When you go to the grocery store, there's the one theme of trying to avoid the inner aisles, in general, is a good rule of thumb for the grocery store. You stick to the outside, although the outside of our grocery stores has all the ice cream, so not entirely true. It does have to be just a general lifestyle and a way of thought, this is not a fad diet. In order to sustain it, you need to start young, eat healthy, prepare your children to eat healthy so that someday when they are older, they have healthy habits, healthy guts, and then they can promote those healthy lifestyles for their children and those around them.

Jane: Let's switch to the final segment of this and look at food as your medicine.

Dr. Lisa Broyles: The most amazing thing is, even back in the day, Hippocrates said, "Let food be thy medicine." They were right. Functional medicine is rediscovering how what we eat actually determines our genetic expression. I think of, you have these proteins that make your body, make DNA that's going to tell it to either get inflamed or

be anti-inflammatory, anti-cancer. I think of it like a railroad track, and there's the train chugging down that track. You come to a signal where you got to pull that lever and that train is going to go to the right or the left.

There's these signal proteins in your body, but depending on what you're eating, that protein is going to make that train go to the right or to the left. If the right is Proin inflammation, you're increasing your risk of cancer, autoimmune disease, and Alzheimer's. If that liver is switched to the left-hand track, then you've got longevity, and you've got health and a great gut. It's all about what you're eating, the environment that you're in, and changing your genetic expression. We never realized this whole field of epigenetics, of how our environment, how what we're eating affects us at a genetic, at a molecular level.

You have to think of food as either a medicine or a poison. I think if you learn to eat this way, you're going to find that you can get off of some of the medicines and start using food as your medicine.

Jane: I was just talking to a neighbor yesterday out on the street and he said, "I've dropped two of my diabetes medicines because now I'm eating almost all vegetables. I eat some meat, but mostly vegetables." He completely changed his diet and lifestyle. He was so excited and he even looked, I thought, a lot better.

Dr. Lisa Broyles: Yes, he felt better. I'm sure he had more energy, sleeping better, all of the above. It's worth it.

Jane: Talk about your body as a colony.

Dr. Lisa Broyles: I really love this topic. I scuba dive and I absolutely love a really healthy coral reef, which, unfortunately, is getting fewer and harder to find these days. You can't think of yourself as an individual. You are a colony. You have to think of yourself more like a coral reef. Your body is made of bacteria on your skin that affects whether you're going to have rosacea or acne. Your body is made of bacteria in your gut. That bacteria is going to do good things for you, like help your body to harness calcium and put it into your bones, and help you to have a healthy immune system. You have to have good flora and the right flora in the gut, on the skin for everything to work correctly.

Your body, it's all one part, but you are a host to many, many millions of bacteria, and you can choose which kind of bacteria are in there. Case in point, Dr Hyman talks about this one bacteria that should be in everyone's gut called Akkermansia. Akkermansia helps you to make mucus in your gut that lines the intestines and helps you not get holes called leaky gut. It helps your gut be healthy. You can increase your Akkermansia in your colony by eating things like grand berries and pomegranates. Your things that

are called polyphenols, green tea, taking green tea capsules, or drinking green tea daily. These will increase the food, which is called the prebiotics, that feed the good bacteria that we want like the Akkermansia.

Jane: You were telling me you love tea. I know you love tea, but you've really increased your green tea consumption.

Dr. Lisa Broyles: I have. I have to say, I don't really love the flavor of green tea, but there's a lot of green teas that you can get that have pomegranate or a little bit of mint. Sometimes I'll mix my loose leaf teas to give myself a little bit of an herbal. I really love the herbal more Kimma meal stuff, but I have started drinking the green tea and I'm starting to develop a taste for it. Again, changing habits. If you really just don't like the taste of tea, then you can buy green tea capsules. One cup of green tea would equal three green tea capsules.

If you're, for instance, a breast cancer survivor, then ideally, you want to try to drink about three cups of green tea a day, which really equals about nine capsules of green tea, which is a lot. Maybe you could mix and match it a little bit. I'm blessed to have a wonderful tea store in our little small town that has loose leaf teas. I just go and I smell, and I pic, and I choose and I blend. I absolutely love my herbal teas. My green teas. She even has one that's called an endurance tea, that I used before and after my athletic events to help my adrenal glands recover, that's full of ashwagandha and eleuthero and Cassandra Berry. Just really good for you.

Jane: You've really inspired me because I always thought I didn't have time to sit and drink a cup of tea. Thanks to you, I got one of those tea warmers.

Dr. Lisa Broyles: Excellent.

Jane: I always have this hot little cup right next to me. I'm drinking so much more tea.

Dr. Lisa Broyles: Wonderful. I took some with me when I'm going on a hike. I'll put it in a mug, and instead of hot chocolate, I've been trying to switch us over to, how about we bring some green tea out on the trail and have some tea. Although, I do bring some hot chocolate for my children every once in a while.

Jane: Talk to me about the fountain of youth.

Dr. Lisa Broyles: Dr. Hyman mentions this. I think it's so true. Just as a society, we have this desire to try to find immortality, this fear of dying, of wanting to preserve our longevity. Really, you have to think of the fountain of life being what you are putting in your mouth. You are the fountain of life. What you are eating is your fountain. You're choosing whether you're going to drink from the sewer or whether you are going to drink

from the fountain of life. By what you're eating, what you are drinking, what you are consuming determines your own personal fountain of life.

Jane: Tell me about food, we've touched on this before, but how it can really change your mood.

Dr. Lisa Broyles: Psychiatric disease is rampant right now. Especially with COVID, we've seen this huge rise in suicide and depression and anxiety, and so much of it. People are packing on the pounds because they didn't go out and exercise. The gyms were closed. Even national parks were closed for a time. Unfortunately, anxiety and depression, people go to their doctor and they're just given an SSRI, a serotonin selective reuptake inhibitor, like Prozac or Paxil, which we don't even really understand how they work, by the way.

The truth is that those can unfavorably make your gut less healthy. They can heal some of the good bacteria that you really want. You can change your mood according to what you eat. Instead of reaching for a bowl of ice cream at night, like I said earlier, reach for a bowl of blueberries, eat some plums, eat some eggplant. You want to eat healthy to improve your brain health and your cognition.

There's a preservative in foods called calcium propionate, which has been linked to autism and attention deficit. It is in most of our cereals and a lot of our grains. Once again, when you're eating things that are chock-full of preservatives and words that you don't know what they mean, good chances are that they're actually bad for your brain and bad for your mood.

Jane: I think the last thing you wanted to talk about was just give us a pep talk, that we need to start today. This is something we can all do.

Dr. Lisa Broyles: Yes. This is something that all of us can do at any time. I do have to say, if you get a hold of these concepts when you are young and when your children are young, you can make a much better, long-lasting difference for yourself and for your friends, your family. Hang out with people that also like to eat healthy. Have a dinner party where you all actually all bring healthy foods and enjoy the way they taste together.

You can have a fun, healthy dinner party and still make it taste good and be healthy. It's challenging sometimes, but it's totally possible. You can have a large variety of different vegetable dishes that taste incredible. Yes, you can have a meat that you have roasted properly, that you've prepared with your herbs and spices, that absolutely melts everybody's mouth, but it's paired with the right vegetables, it's cooked appropriately.



Jane: Excellent. Dr Broyles, thank you so much. It's just such a joy to listen to you and hear your words.

Dr. Lisa Broyles: Thank you.

Jane: You take care of yourself.

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