

## Renegade Health Inner Circle Interview with Dr. Russell Blaylock

Kevin: Welcome everyone. This is Kevin Gianni from RenegadeHealth.com. Tonight we have a very special guest on our Wednesday Night Series. Our guest today is Dr. Russell Blaylock. If you don't know who Russell Blaylock is, he's a board-certified neurosurgeon, author and lecturer. But most importantly he's going to talk about excitotoxins. That's what we're going to be talking about today. Dr. Blaylock has written and illustrated three books. The first book is "Excitotoxins: The Taste That Kills" is about how excitotoxins are related to diseases of the nervous system. The second book, "Health and Nutrition Secrets That Can Save Your Life" covers the common basis of all diseases, nutritional protection against diseases of aging, protection against heavy metal toxicity, the fluoride debate, pesticide and herbicide toxicity, excitotoxin update, the vaccine controversy and much more. The third book, "Natural Strategies for Cancer Patients" was released in April 2003 and discusses the ways to defeat cancer, enhance the effectiveness of conventional treatments and prevent complications associated with these treatments. His website is [www.blaylockwellnesscenter.com](http://www.blaylockwellnesscenter.com). You can go there and familiarize yourself with some of his books, DVDs and a whole bunch of other good stuff. Dr. Blaylock, welcome to the call.

Dr. Blaylock: Thank you. I appreciate it.

Kevin: I have a question for you. How does a board-certified neurosurgeon get into natural health?

Dr. Blaylock: I attribute it to my father. He was always interested in natural health and vitamins and minerals. Of course, this was 44 years ago. I was interested in it, just listening to him talk. He was always bringing home books about different nutritional things. We didn't know a lot back then but I found it intriguing. As I moved on into college and was taking biochemistry in school I found it even more intriguing. Now it's such a huge field. There's so much study done on the field of nutrition and supplementation that it's a lot more interesting because we have a lot more data confirming the beneficial effects of all of these things.

Kevin: You just mentioned science. This is a question that sort of draws there. Do you think it's better that we have more science now or do you think if we went back to 40 or 50 years ago we might be better off?

Dr. Blaylock: I think it's good to have the science because it confirms that this is not just something that's an old wives' tale or some herbologist that is self-trained just taking things out of the yard. Now we know why these things work, how they work, the complexity of them. It really brings the magic to it when you start looking at these herbs and plant compounds. It really shows you the miracle of creation and how these things were made by the creator. I think that's intriguing. To me science is just the study of what's been created. Unfortunately, now science thinks it's the creator. To me it's being able to take a glimpse at what God has created and look at it in a sense of amazement.

Kevin: Great. A lot of your work is about excitotoxins. Why don't you explain, first what that is. Some people listening might not know what that is. And then two, how you got into that study.

Dr. Blaylock: Well, it was really quite by accident. I really had not intended to do it and didn't really know anything about excitotoxins. Like most of you, I'd heard of the MSG-type syndrome with the headaches and flushing. I didn't know a lot about it. I stumbled across an article when I was doing some studies on behavior and nutrition, about how nutrition affects behavior and the brain. I came across an article on endocrinology and the effects of MSG on these brain centers and the things they knew about it at the time, really in the very beginning. I found it intriguing. Then I found connections to some very bad diseases like Alzheimer's and ALS and Huntington's disease. It appeared that these excitatory [indecipherable] were playing a major role.

At the time they didn't even recognize that glutamate was a neurotransmitter. They weren't sure what it did in the brain. But since that time we've learned an enormous amount about it. Since I've written the book "Excitotoxins," which was in 1994 the amount that we've learned about these substances is just incredible. It's now considered to be one of the major contributors to almost every neurological disease. You can't pick up a neuroscience journal or a neurology journal where they're not talking about excitotoxicity. It's a very big field, a major field in why things happen to the brain. Particularly now the interest is in things like depression and addiction, the higher-order brain functions.

We've learned that glutamate is actually the number one neurotransmitter in the brain, in the cortex. It makes up 90 percent of all neurotransmissions. So it far exceeds all the other neurotransmitters and actually plays a role in controlling nerve function, like serotonin, dopamine, norepinephrine. They're regulated by the glutamate receptors. The glutamate

receptor system is enormously complex. It's very, very complex. It explains the complexity of the brain because of the complexity of this particular type of receptor.

The thing that concerned me was that all processed food contains variable amounts of glutamate additive. Some foods, quite a few of them, have just enormous levels. They have an impact on disease states like Alzheimer's, dementia, ALS, mental cognitive impairment, brain trauma, stroke. All of these things they're playing a major role. So people are eating foods that contain enormous amounts of these things. It's putting them at extremely high risk. So that was a big concern.

But now we're finding out that it's also playing a major role in human behavior. As I said, it seems to be the main neurotransmitter involved in depression. We used to think depression was serotonin, dopamine. They play a role but it appears that the major role is by glutamate-type receptors and neurons. Even addiction, people that become highly addicted, have very high levels of glutamate transmission in particular parts of their brain. Schizophrenia now is considered a glutamate disorder. We're beginning to find that virtually everything you can name neurologically in some way is connected to this excitotoxin process.

The problem is that the neurologist, the practicing physician, has no concept of any of this. It's way over their heads. Most of them have never even heard of it. They certainly have no understanding of the dangers of this enormous amount of excitotoxic additives to our food.

For instance, some potato chips have three or four different forms of this glutamate added. And they have liquid forms. They put it in gravies. The government allows them to put enormous amounts in foods. They can even disguise it. Since I came out with the book and have done a lot of interviews the food industry recognized that a lot of people were refusing to eat these foods and so they started using disguised names. They even put on the label, "Contains no MSG." You look at the label, it has about three or four different forms of disguised MSG and glutamate. So there's a lot of chicanery in food manufacturing.

One of the really big things that concerned me was the children. Children were eating a lot of these snack foods that are enormously high in excitotoxins. It has effects on their behavior, things like disruptive behavior, anxiety, panic attacks, depression, anger, violence, being unable to concentrate in school, paying attention, being disruptive in the classroom. All these things are related to that. It's in the neuroscience literature. We know it now and how it works and why it does that.

Well, glutamate is the main excitatory transmitter in the brain. That's its function. But it's also one of the most toxic neurotransmitters in the brain. It has to be very carefully regulated by the brain. We were not meant to eat foods that contain enormous amounts of glutamate. Humans are about five times more sensitive to the toxicity of glutamate than any known animal. Young humans are about four times more sensitive than a full-grown adult. So they're at the highest risk of having severe problems.

So despite the fact that we know all of these things, most of the public is completely unaware of it. The vast majority of physicians have never heard of it. Even neurosurgeons, neurologists that I've talked with over the years, they've never heard of it. You can pick up any neuroscience journal and it's one of the main topics that they're talking about. It's considered to be this central mechanism in a great number of neurological disorders. Most of the pharmaceutical drugs are now being designed to produce protection against excitotoxicity in the brain.

When a person, and they've measured this in several different studies, eats glutamate in their food their blood level goes up about 20 to 50 fold. So it's a tremendous elevation in their blood levels. That seeps slowly into the brain and increases this excitotoxic damage. As you get older your blood/brain barrier is not as effective. So the older people start getting a lot of complications from it.

People eat these things and they don't recognize the symptoms. Since it's an excitatory neurotransmitter one of the common symptoms is insomnia. Most physicians know that's one of their biggest problems they see, people with insomnia. A lot of young people are having trouble sleeping. If they eat a late supper that's high in glutamate the brain is going to be so aggravated in this excitotoxic state that you're not going to be able to sleep. You have a phenomenon called forced thinking, where all these thoughts are flying through your head and you just lay awake with these thoughts flying. The physician doesn't have a clue as to why. They just pump you full of medications to force you to sleep. Of course, you're not getting restful sleep because under that drug cloud your brain is still firing like crazy. It destroys the different connections in the brain, the synapses and dendrites.

I've spent a lot of time studying the brain but then I discovered that this is a really unusual receptor. It is found through everything that's alive. It's a transmitter and receptor that's used in plants, in bacteria, various microorganisms. It's everywhere. Every animal has glutamate receptors. It is the major transmitter in the entire body. They've now discovered that there's glutamate transmitter receptors in the bones, in the muscles, through the entire GI tract, the lungs, the pancreas, the reproductive organs. Every tissue in the body has glutamate receptors, just like the brain.

So when you're eating this food that's very high in these excitotoxins you're over stimulating these receptors and all of these organs. We know when you over stimulate those receptors it makes the body produce enormous numbers of free radicals. That increases your risk of a great number of diseases, including heart attacks and strokes. A recent study found that all the lining of the arteries has glutamate receptors. They found that if you take animals and you feed them MSG in about three or four doses when they're young and then stop feeding them the MSG, they have high levels of free radicals produced in their blood vessels for the rest of their life. With humans consuming such massive amounts of this stuff when they're young, it means their blood vessels are producing a lot of free radicals and it explains why now we're seeing a tremendous increase in strokes in young people, something we used to rarely see. But it's increasing tremendously. It's because they're consuming massive amounts of this MSG-containing food.

All your organs contain these glutamate receptors and it's playing a big role in a number of diseases. One of the diseases that really concerned me is that they discovered first in the brain that brain tumors grew infinitely faster, about six times faster, in the presence of glutamate. The brain tumor became significantly more invasive, so it became incurable. When they started looking at other cancers, to their surprise they found virtually all cancers grow infinitely faster in the presence of glutamate and invade other tissues and metastasize throughout the body much faster in the presence of glutamate. They found, in fact, if you looked at certain cancers the one that secreted the most glutamate grew the fastest and were most incurable. The ones that had the lowest amount of glutamate were much easier to cure.

When they started looking at this they found out that if you expose these tumors to glutamate they grew real fast but if you blocked the glutamate receptors the cancer began to slow down its growth tremendously. If you added glutamate blocking drugs to the regular chemotherapy drugs they started working a lot better. The fact was you were preventing that glutamate stimulation of the cancer growth and invasion.

Much to my joy was the fact we discovered that there's a great number of naturally occurring substances that significantly reduce glutamate excitotoxicity. For instance, things like green tea, resveratrol, curcumin and quercetin, apigenin and nertolin [?]. They're all very powerful inhibitors of this glutamate growth process, particularly in cancers. It may explain why a number of these natural found substances are enormously powerful at inhibiting cancer. In fact, if you look at people who survived what would be considered incurable cancers, most of them are consuming a very high concentration of these substances. We've seen some pretty remarkable cures in some people that would normally be classified as incurable by traditional medicine.

When you combine these flavanoid substances from plants and fruits and teas with conventional chemotherapy, we find that chemotherapy works infinitely better and you have far fewer side effects. Even if you decide you want to follow the traditional treatment of cancer, you're going to do a lot better with a specifically designed combination.

I know a number of people who have widely metastatic cancer whose survival rate would be less than 10 percent for five years who have gone 10, 15 years doing very well, as long as they stay on this diet and continue to consume these powerful anti-cancer flavanoids.

When we look at the brain, and one of my interests is in neurodegenerative diseases like Parkinson's and Alzheimer's and ALS, these same flavanoids from plants are very, very protective of the brain. We know that, for instance, the epigallocatechin gallate from green tea powerfully inhibits what we call immuno-excitotoxicity, which is the inflammation of the brain that's combined with the excitotoxicity. It has a very potent effect in calming it down. We know that resveratrol does and that curcumin is enormously powerful at protecting the brain against this immuno-excitotoxic process. We know that lactic acid, quercetin... We know that the DHA from fish oil... Magnesium. All of these things, what they do in the brain is they calm down the immuno-excitotoxicity.

I'm going to revise the old excitotoxin book and bring it up to date and put a new title, "Immuno-Excitotoxicity" because now we know that over activation of the immune system, this inflammatory, chronic process, causes excitotoxicity to be magnified enormously. This seems to be the cause of most of our degenerative brain disorders like Parkinson's and Alzheimer's.

For instance, if you look at Parkinson's, the number one cause is exposure to pesticides, even in extremely low concentrations. It activates the brain's immune system. The microglia produces a chronic state of inflammation. That triggers excitotoxicity and destroys the cells and the connections. These flavanoids and these different nutritional substances like vitamin E and C and your traditional vitamins, your riboflavin, thiamine, they all protect against this excitotoxicity and calm down that immune over-activity. It's going to make a big difference. We're already seeing in some of the early studies a dramatic slowing down of the progression of things like Alzheimer's disease. In some cases it's reversed.

There was a letter to the editor of Science Magazine, a physician was writing in and talking about his mother. He said she stayed on these supplements that were anti-inflammatory and she did fine. He doctor took her off of them for some reason and she became demented. He remembered that so he put her back on them and her dementia went away and she was fine. So if you catch it early you can certainly slow it down or possibly reverse it. When

we look at what we know about the path of physiology of Alzheimer's disease and other dementing diseases it makes sense.

These supplements, the flavanoids, are just very, very powerful anti-inflammatories. The advantage over drugs is the drugs have so many side effects that you can't take them. They're so specific acting on certain enzymes that they don't have this global effect that a naturally-occurring flavanoid from a plant has. So the curcumin is equally powerful as an anti-inflammatory as steroids or your non-steroidal anti-inflammatory drug, but without the side effects. Its side effect is that it strongly inhibits cancer. It repairs and helps repair the immune system and strengthens the tissue, protects you against toxins, reduces free radical damage and damage by lipid oxidation. The ironic thing about these powerful plant flavanoids is their side effects are mostly beneficial, enormously beneficial. So you're not only protecting your brain against degeneration you're protecting yourself against cancer, you're protecting yourself against diabetes, heart attacks, stroke, atherosclerosis, all of these things at the same time. That's really the beauty of changing your diet, eating a diet that's high in these vegetables and fruits and making sure that they're clean of pesticides and herbicides and these dangerous elements.

Kevin: Did you say that glutamate is produced by a cancer tumor?

Dr. Blaylock: Yeah. Some cancers like melanomas produce enormous amounts of glutamate. But you can do things to reduce its ability to produce glutamate and protect the cancer against the glutamate that's being secreted.

What amazes me, when I started looking at the dietary program of some of the major cancer centers in the United States, I found out they were recommending patients consume a diet that's very high in glutamate. No one was telling them to avoid glutamate, that it would make their cancer grow faster and become incurable.

I spoke at a meeting and an oncologist came up and told me, identified herself and said, "I'm an oncologist and I really don't appreciate you saying that we don't tell our patients to avoid glutamate." I said, "Do you do that?" She said, "Well, no." I said, "Why not?" She said, "Because nobody told us to." I thought that was rather infantile. That's what you'd expect from a third-grader. I said, "I get this information out of the oncology journals. There's quite a few studies that have appeared in your journals. There's a lot of them now because it's a big area of research showing that it is a major stimulant for invasion and making cancers incurable. Yet you're not telling your patients to be careful of what they eat."

Kevin: You mentioned MSG. What are some of the other sources that people would find glutamate in their foods?

Dr. Blaylock: There's quite a few. You look on the label of most processed foods and they'll all have these names, things like hydrolyzed protein, protein isolates, soy protein concentrate and isolate, carrageen. Caseinate is a very common one. It's a milk protein high in glutamate. Stock, broth, all of these things, enzymes, yeast. Those are all code names for glutamate. They can be quite high in glutamate. Those are the primary ones.

What concerns me is the massive consumption of soy in this country. Eighty-percent of all soy is GMO. That should concern people. But recently they discovered that soy has enormously high manganese levels. It has elevated fluoride levels and it's high in glutamate. It has one of the highest glutamate levels of any plant. So when you drink soy milk and soy juices and things you're consuming something that's very close to liquid MSG, plus the toxicity of the manganese.

Manganese is now recognized as a major neurotoxin. There's a lot of concern that all these children are drinking soy formulas, babies, because of the high manganese content. If you combine the excitotoxicity and the manganese, which is a powerful inflammatory to the brain, you've got a major problem consuming all of this.

People need to get off this soy wagon. All this stuff we hear about it preventing breast cancer and prostate cancer, most of that's not necessarily true. There are some components that have cancer-inhibiting effects, but there's others that are cancer-stimulating like the glutamate. Anything that increases inflammation increases cancer growth. So if you're consuming a lot of manganese you're stimulating the cancer growth as well.

Kevin: Let me ask you this. Kombu is where a lot of MSG is naturally processed from. Is it safe to eat a seaweed like that?

Dr. Blaylock: I wouldn't. Anything that's a natural source, if you eat the whole plant you're getting a lesser of a concentration and slower absorption. So it's not as toxic. What they do is they concentrate it. That's what hydrolyzed protein is. They boil the vegetables in an acid solution to release the glutamate and they concentrate it and neutralize it with an alkaline and it turns into a brown powder which is very high in glutamate. If you take hydrolyzed protein and you inject it in an animal, you'll get the same brain lesions that you get with injecting MSG. They're purposely concentrating it.

This is the problem with stock and broth. Broth is from the natural meat but what the meat is doing as you cook it is it's releasing glutamate, a liquid form of glutamate. That's why they use stock and broth, because it adds flavor. Well, that's what MSG is for. It's a flavor-enhancer. It's not a preservative. It doesn't do anything else but enhance flavor. So I tell people, "Don't use stock. Don't use broth. Don't use any of these amino-acid liquid

formulas.” They’re usually very high in glutamate, aspartic acid, which are both excitotoxins and have an additive effect. They need to avoid them.

Kevin: Aspartame is grouped into the excitotoxin category. Can you explain a little bit about that?

Dr. Blaylock: Aspartame?

Kevin: Yes.

Dr. Blaylock: It contains an excitotoxin, aspartic acid. That’s part of the molecule. It’s main problem is it’s breakdown product is it slowly breaks down and turns into a potent carcinogen. It turns into a DNA toxin. It breaks down into, part of its molecule is formaldehyde, which is associated with a high incidence of brain cancer. That’s one of the things we see with people who consume a lot of aspartame. They have a high instance of brain cancer. That’s what they found when they first studied aspartame. There’s a 47 fold increase in brain cancer in animals that were given the aspartame. It was dose-related. The more they consumed the more brain tumors they developed.

What we’re seeing is an enormous number of brain tumors in young people in this country. The neuropathologists haven’t a clue as to why. They can’t find anything other than the massive consumption of aspartame. Formaldehyde has always been known as a major inducer of brain cancer, brain tumors. You consume a lot of aspartame you’re consuming a significant concentration, in relative terms, of formaldehyde, which very tightly binds to the DNA. It’s almost impossible to remove. Once it binds to the DNA it breaks it. That’s what leads to the cancer.

They knew this in the early studies before it was ever approved. In fact, that’s why it was not approved to begin with because it produced so many brain tumors in the experimental animals. But they just waved it aside and approved it anyway for monetary reasons and pay off of people that had the power to override these decisions of the scientists. So now everybody is getting poisoned with aspartame.

I would warn people to avoid it. Particularly don’t let children drink it. That means they’ll have a lifetime exposure. It puts them at a high risk of things like leukemia. There’s a new study out that, one of the largest ever done, it’s a lifetime rat study done by a very prestigious group. They found a significant increase in leukemias and lymphomas. Well, that’s the fastest growing malignancy in people age 30 and below. Of course, those are the people consuming the most diet drinks and aspartame-sweetened foods.

They also found an increase in breast cancer and brain cancer. These things are, again, confirming their earlier reports, earlier studies, that this is a

substance associated with significant increase in some very deadly cancers. I don't think I would risk the idea of losing weight and exchange it for leukemia, lymphoma or a brain tumor or breast cancer.

The interesting thing was several new studies have come out and showed that aspartame and in significant number of people actually causes weight gain rather than weight loss. In the book I wrote about obesity and MSG. Since that time there's been a lot of studies in laboratories all over the world showing that early exposure to MSG as a child or small baby programs that child for a lifetime of gross obesity.

They also have a very high incidence of metabolic syndrome, where they have diabetes, hypertension, abnormal blood lipids. Americans, about 45 million are suffering from metabolic syndrome and it's going up to almost 70 million. Mainly it's hitting young people, the very people whose parents were taking high intakes of MSG. They took it when they were pregnant and now they're giving it to the children and we're seeing this epidemic of obesity. If you look at the studies, every animal species known, if you feed them MSG early in life they become grossly obese and they develop type II diabetes and metabolic syndrome.

So we're paying a huge price for people not being told this. The people that are told, when they ignore it they're running a risk of ruining their children's lives because the science is there proving that this is a major risk factor for gross obesity.

The characteristics of obesity is it's very difficult to exercise at all. It's very difficult to diet at all. It's a very tenacious obesity.

Kevin: In aspartame didn't they recently just change the name of aspartame products?

Dr. Blaylock: They're always changing the name of these products. It's hard to keep up with them. They do that because they know there's a lot of bad publicity and people are starting to hear things. So they just change the name of the product. They do this with MSG. They're just constantly changing names.

I spoke at a conference in Chicago and one of the manufacturers of food additives was at the conference. After I spoke he came up to me and asked me, "What's your objection to MSG?" I said, "You heard my talk. You know what it is." He said, "I just want to let you know as the manufacturer of this, we're going to put it in the food no matter what we have to do. We're going to keep it in the food." I said, "That's fine but I'm going to tell everybody I can what you said." So now your audience has heard straight from the mouth of the person who told me that they were going to do whatever they had to do to make

sure these dangerous additives remained in the food. They didn't care what the science showed.

Kevin: So they're leaving it in because it tastes better, right?

Dr. Blaylock: It's a taste enhancer. Early on they had a lot of problems with canned foods because it had this tin-like taste, this tinny taste. So people didn't like canned food. They started putting MSG in it and you couldn't taste it. MSG makes everything taste delicious. You put MSG in a soup, nobody can compete with it. You can use rotten vegetables and rotten meat and put MSG in it and it tastes delicious. So they caught on very quickly back in 1948. So all the manufacturers use it. One is not going to quit using it and let the others use it because the ones that are still using it, their food is going to taste a lot better.

What they need to do is learn the old way, to use spices and herbs and things in the food and it tastes delicious. You don't have to add dangerous MSG chemicals to it or glutamate chemicals to it. The American public can put an end to it because all they have to do is say, "Well, we're going to just eat homemade, fresh foods that we make ourselves and we're not going to buy your processed junk anymore." If they do that they'll wise up and start cleaning up the food. But when you have teenagers sitting in front of the TV eating an entire bag of Doritos, which has very high glutamate in it, you're going to have problems. That junk food is very popular with teenagers because it tastes delicious.

Kevin: You mentioned MSG syndrome. How does someone know they're experiencing it?

Dr. Blaylock: If you have MSG syndrome you're really a lucky person because you'll avoid it. If you go out to eat and there's food that has a lot of glutamate in it, you may have a tremendous pounding headache. You start flushing in the face. Some people flush in the chest and the arms. Their heart starts beating real fast. They feel palpitations, shortness of breath. Some people develop diarrhea after eating because of the glutamate receptors in the GI tract. Those are the common symptoms of MSG-type syndrome. But the problem is that people who don't experience that are at the biggest danger because all this subtle damage is going on in their brain and they don't really feel anything that untoward going on. They have a little trouble concentrating, they can't sleep at night, they feel a little jittery. But they don't attribute it to what they ate. They go to the doctor and he's not going to say it has anything to do with it because he's clueless concerning this.

This is what I find when I switch people to diets that are mostly vegetables and clean foods that they make themselves, within two weeks they say the same thing. "I can think so much clearer. It's like a fog has lifted." So most people feel that way. With this foggy mind it's difficult to concentrate and

think and articulate. They think that's normal. I've had a lot of young people that I've put through this and they've said, "I just thought you were supposed to feel like that." I said, "No, you're not. You're supposed to feel clear-headed. You're supposed to sleep good at night. You're supposed to be able to articulate and use your speech patterns properly at your age."

This is one of the things that shocked me when I was practicing neurosurgery. All these young people were coming in complaining of memory problems. Some of them would be in their 20s and want to know if they had Alzheimer's disease. I would laugh. I would say, "You're 20-something years old." I remember when I was growing up I had an incredible memory. Most of my friends never complained of memory problems. But now it's very common. I'm connected with the biology department at a university here and the head of the department told me you have to realize these students aren't bright like they were when you were in college. He said, "A lot of these students have real problems getting through coursework. We have to kind of dumb it down a little bit for them." I think most of the educational system is the same. They have to keep it on a lower key because there's a lot of students out there that just cannot think. They're having difficulty using their minds. They're in this excitotoxic mode. The parents aren't aware of it. The parents think it's normal, "I pretty much felt the same way." If they get off of that food they find out that they can think a lot clearer.

Kevin: You said that humans were five times more sensitive to glutamate. Have there been studies now specifically on humans? I can imagine this is why there's a big riff between whether or not it was actually causing some of these problems.

Dr. Blaylock: Yeah. There's quite a few studies, particularly in Germany. German scientists and doctors are really concerned about glutamate toxicity. They're convinced it's a cause of obesity and they're convinced it's the cause of a lot of neurological dysfunction. I used to see patients all the time have seizures. They'd be on three and four different medications. They could hardly function because they were on so many medicines and they were still having seizures. I'd take them off of the MSG, clean up their diet, put them on some things I knew that counteracted excitotoxicity and their seizures would stop and they could get off the medication. If they weren't able to get off medication they took a lot less medication and they felt better. Well, it's ridiculous to treat seizures as a physician when all the literature says seizures are caused by excitotoxicity and not tell them to clean up their diet because they're consuming massive amounts of MSG and other glutamate additives that's driving the seizures.

So just simple things like that that's commonsense. Unfortunately, medical schools aren't teaching it and the doctors don't know it. Even neurologists are not paying any attention to it. They're all these seizure patients

by just drowning them in drugs. The poor kids that have seizures, one of the biggest problems, and this is since I was in medical training 40 years ago, was that the kids are having trouble learning. They're so neurologically-suppressed by the drug they can't learn. So they fall behind in school. They're mentally slow. The doctor says, "That's what we have to do to control the seizures." Well, it is if you're going to let them consume the very thing that's driving the seizure.

Kevin: What do you think about the relationship between pregnancy and excitotoxins? How is an unborn child affected?

Dr. Blaylock: It's particularly dangerous in unborn children. That's because if you look at how the brain forms, particularly during the last trimester of pregnancy, which is a very rapid period of brain formation, the last trimester and the first two years after birth, during that period what the brain does is glutamate is a chemical that designs a lot of the structure of the brain, how all the little cells line up and make their connections. All the pathways develop, which is enormously complex. It's dependent on glutamate so at certain periods the glutamate level in the brain rises and at other periods it falls. So this rise and fall in the glutamate level in the brain is very carefully controlled and very important. If the glutamate level is high at the time that it should be low it causes these pathways to be abnormally developed. That's been studied extensively. We know that.

We also know that glutamate passes through the placenta. So if the mother is eating it and she gets a 20 fold or 50 fold increased blood level of glutamate, it's driven through the placenta. Some studies have shown that actually the baby's concentration is twice the mother's. That surge in MSG occurs at a critical period in the brain formation and the child is going to have behavioral problems, learning problems, language problems, when they get older. Of course, the doctor is not going to know anything about it. He's just going to say it's just one of those things. Well, he's not paying attention to the fact that more and more children are born with learning problems. You start looking at the literature on it, as much as ten percent of the children are born with language and learning problems. That's just an enormous number of children. You're talking about 4.5 million children are born with significant language and learning problems.

The vaccines play a big role in it, but the interesting thing about vaccinations is the way they do it, the schedules they use and the number of vaccines that are given, significantly increases glutamate in the brain. You can make the brain secrete high levels of glutamate by stimulating the immune system. When you vaccinate children and you vaccinate them every month with a series of six to seven or as many as eight vaccines at an office visit, that is a massive systemic immune stimulation. That's been shown to activate the brain's microglia and the microglia secrete large amounts of glutamate. So the vaccine schedule is adding to what's being done by the diet.

We're really seeing a tragedy now because so many children are learning disabled. It's become epidemic in this country. You talk about autism, one in 80 children in some studies to one in 50 children born are having some degree of autism. If you take all learning disabilities it's much higher than that, maybe one in 10 children. So most children or a good number of children are being born with significant learning difficulties, language difficulties.

The things we know that can cause that the doctors either aren't aware of or are ignoring and they keep us this insane vaccine schedule.

Kevin: You've been speaking about this excitotoxin issue for over 15 years now. Have you had an opportunity to speak to regulatory agencies to explain this stuff? Or is that just not an option?

Dr. Blaylock: They know it. It's not a matter of them not being aware. They know it. Any time you look at regulatory agencies, they're controlled by politics. I've known a number of scientists who worked at regulatory agencies - the EPA, FDA. They're very good people. They're good scientists. They want to do good. But they have to do what their supervisors say. Their supervisors are told by the politicians what to do. So the people making this garbage and putting it in the food pay off the politicians. The politicians put the pressure on the supervisors and so nothing gets done. We have these regulatory agencies who won't look at it because of political pressure. It's obvious. You talk to these people. They tell you that. There've been lawsuits filed by FDA scientists who were fired for daring to speak out and they took it to court and won but it cost them a huge amount of money. It's no secret. We know how the regulatory agencies work. They're owned by the people they regulate. You get the food manufacturing companies, they're enormously wealthy, enormously powerful and very influential in Congress. So the regulatory agencies are never going to do anything. It's not that they don't know it's that they don't care. The people in the agencies that care have no power. They have to do what their supervisors say.

Kevin: This has been an incredible interview. Why don't you tell everyone where they can find out more information about you and your books.

Dr. Blaylock: They can go to my website [www.blaylockwellnesscenter.com](http://www.blaylockwellnesscenter.com). It has books. I have some Cds, DVDs out. One is a lecture on nutrition and behavior that goes into the details of just how regular nutrition, not just MSG but other nutrition, affects behavior and the dramatic effect it can have when you change it. In fact even criminal behavior, just by changing a few food items. So they can go there and it has almost all the information they need. I have another website, which is [russellblaylockmd.com](http://russellblaylockmd.com). They can download some articles I've written for free

and look at that. Whenever I write something I put it on there and they're welcome to it. It'll give them a lot of information.

I also have a newsletter and a Blaylock Wellness Report.

Kevin: How can someone get that?

Dr. Blaylock: You can get it through my website or the [blaylockwellnesscenter.com](http://blaylockwellnesscenter.com).

Kevin: Great. If everyone out there likes what they're listening to now I would definitely recommend checking out some more information. That DVD actually sounds really good. I think I'm going to go order it right after I get off the call. Dr. Blaylock, I want to thank you so much for being a part of this series. I really appreciate it.

Dr. Blaylock: I was glad to. I appreciate the opportunity.

Kevin: To everyone else out there, this is Kevin Gianni with Dr. Russell Blaylock. Together we can change the health of the world one show at a time. Thanks for listening. Bye.