

## **Interview with Neurosurgeon Russell Blaylock**

ANNOUNCER: You are listening to Personal Achievement Radio, AM 1390 WZHF, and it's time now to turn the air waves over to Mission Possible Radio, dedicated to the eradication of aspartame as an additive in food preparation. Here are your hosts Jon Baum and Mark Baran.

JON BAUM: Welcome to Mission Possible Radio. My name is Jon Baum. Mark Baran is off today. Betty Martini is taking his place from Atlanta. Mark Baran, Betty Martini and myself are volunteers. In this hour show, you will learn about a sinister plot by Searle Pharmaceuticals, Monsanto Corporation and the United States government to unleash a very dangerous addictive drug on the world's population which causes symptoms as mild as migraine headaches to symptoms as serious as seizures, cancer, blindness, Alzheimer's and death. Today we have a very special guest and I don't want to keep him waiting. Betty will you please introduce our guest Dr. Russell Blaylock.

BETTY MARTINI: Yes Jon. I'm delighted to introduce Dr. Blaylock. He has been in private neurosurgical practice for the past twenty one (21) years and at present, he is in neurosurgical practice in Jackson Mississippi with a Clinical Professor's Appointment at the Medical University of Mississippi. He's appeared on the 700 Club seven (7) times. He's appeared on Lifestyle Magazine Television Show and syndicated radio programs thirty (30) times discussing the effects of exitotoxins in food additives on the nervous system. He has written to over a dozen scientific papers on various subjects, chapters in three medical textbooks on brain trauma, a patient booklet on multiple sclerosis, and is in the process of writing another book on brain diseases and how to prevent them through nutritional methods. He is the author of "Exitotoxins: The Taste that Kills," and get this book if you're on the internet system, you can get this by calling 1-800-643-2665. Welcome Dr. Blaylock.

DR. BLAYLOCK: Thank you Betty, I appreciate it.

BETTY MARTINI: Dr. Blaylock, tell us, what is an exitotoxin and where are they found?

DR BLAYLOCK: Well, an exitotoxin is a rather unusual group of compounds most of which are proteins that we're particularly concerned with. But, these are substances that when you expose brain cells to it which we call neurons, these brain cells become very hyper-excited so that they're firing their impulses very rapidly. They keep doing that until the cell becomes so exhausted it'll die and that's the reason we call that an exitotoxin. Normally these substances in the brain for example, glutamate and aspartate are used as transmitter substances, that is a substance that allows these cells to communicate with each other. But these compounds are so toxic that the brain keeps them in minutely low concentrations. It is very carefully regulated. So anything that alters that so that these compounds increase, it can destroy brain cells and produce what we call neuro-degeneration or degeneration of the brain and spinal cord. Now, where they're found, they're found in various plant substances. As far as most people are concerned, you're most likely to be exposed to exitotoxins as food additives. One of them that most people are familiar with would be monosodium glutamate or MSG. It occurs in various disguised forms, hydrolyzed vegetable protein, vegetable protein, soy isolate, etc. Another form it is found in is one of the components of aspartame or NutraSweet, which is made of two

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amino acids, and methanol, phenylalanine and aspartic acid. Aspartic acid is an excitotoxin that is approximately as powerful as glutamate as an excitotoxin and the phenylalanine is an amino acid that is known to produce seizures and act as a neurotoxin at high levels in the brain as well.

JON BAUM: Dr. Blaylock, can naturally occurring proteins be harmful to the brain?

DR. BLAYLOCK: Well generally, the way things are arranged in nature, almost all of the amino acids occur as whole proteins, so that the body slowly assimilates it and breaks it down and converts it in the liver so that the level or concentration of their amino acids is always kept at moderately low levels, so that the brain is not assaulted by these dangerous proteins. And what happens is when we start manipulating foods and drinks and creating sweeteners that contain high levels of these amino acids in isolation the blood levels can get quite high in fact, tremendously high, and this results in a significant elevation of these amino acids in the brain and that's what has most of us worried is that it's at a level high enough to produce destruction of certain groups of brain cells and produce disease, seizures or even death.

BETTY MARTINI: Why are isolated amino acids so dangerous Dr. Blaylock?

DR. BLAYLOCK: Well, as I said the isolated amino acid is an unnatural situation in high concentrations. Normally the body keeps it low by assimilating or breaking down proteins very slowly so that the body can incorporate them in areas where they will not reach toxic levels, but it's a completely abnormal and artificial situation to have amino acids in high concentrations and I think this is one of the things that the general public needs to realize because a lot of the defenders of these food additives say well, "These are natural products, these are amino acids that are found in nature." They are not found in isolation and it is not normal for the human body to have plasma or blood levels that are extremely high as we see after one consumes NutraSweet or a meal with MSG in it. We are seeing blood levels that are not found in nature, if you consume normal foods you will never develop these high blood levels.

BETTY MARTINI: Jon?

JON BAUM: Why do you think aspartame is so dangerous?

DR. BLAYLOCK: Well, a lot of the book that I wrote about excitotoxins concerns glutamate, MSG and that sort of thing or the glutamate that accumulates naturally in the brain in pathological conditions, but the story of **aspartame is that aspartame contains aspartic acid which is also an isolated amino acid that is just as toxic as glutamate**. What makes aspartame particularly dangerous is that it contains three neurotoxins. **Methanol is a very powerful neurotoxin, in fact the EPA controls methanol exposure very carefully allowing only very minute levels to be found in foods or in environmental exposures. But, it's interesting that the level allowed in NutraSweet is seven (7) times the amount that the EPA will allow anyone else to use.** So methanol is an extremely powerful neurotoxin. It can produce blindness, it can produce cellular destruction in the brain and spinal cord in particular the optic nerves that has to do with our vision. The second amino acid, aspartic acid of course is an excitotoxin that can produce cellular excitation, cell death in the brain, it can alter the way the brain is formed in newborn babies that permanently changes the brain formation, results in behavioral changes in children, hyperactivity. The phenylalanine can also alter how the brain is formed during the fetal

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formation of the brain and thereafter, it can produce lowering of the seizure threshold so you're more likely to have a seizure. **Phenylalanine and aspartic acid are both well recognized neurotoxins. So this combination by putting three relatively powerful neurotoxins into one combination is just to me unbelievable.**

BETTY MARTINI: Well, we've heard a lot about the blood brain barrier. Doesn't it prevent these amino acids from entering the brain?

DR. BLAYLOCK: Well, this is one of the other things that the defenders of these compounds, food additives, usually bring up is that the brain has a barrier system that would keep these toxic substances from entering the brain, and they are well aware that it's not true. There's an enormous amount of research, particularly recently in which the levels of this glutamic acid, aspartic acid and phenylalanine have been measured inside the brain after injection of NutraSweet or MSG. It has clearly shown that these substances accumulate in very high concentrations within the brain. One study which was recently done indicated that the previous studies that said phenylalanine does not increase in the brain, what it showed is that this really was kind of a deceptive study in that they homogenated or ground up the entire brain of these animals and measured phenylalanine levels. But, when they repeated this study and measured the amount of phenylalanine in particular areas of the brain they found the phenylalanine tends to accumulate in the critical areas of the brain so that while the whole brain has normal phenylalanine levels, these critical parts of the brain have very high phenylalanine levels. For example, the hypothalamus which controls so many aspects of our functions, not just the endocrine system but it controls our heart rate, it controls the autonomic nervous system, the sleep/wake cycles, your appetite, it controls the emotional system -- this area of the brain has been shown to have very high accumulations of phenylalanine. The medula oblongata at the brain stem accumulates it, the corpus striatum which is related to Parkinson's Disease, all of these areas are known to accumulate phenylalanine. So this shows that how these studies can be somewhat deceptive until we look closer at them.

JON BAUM: Dr. Blaylock, can we hold that thought and we'll be back in a few minutes.

DR. BLAYLOCK: Sure

(BREAK)

JON BAUM: Welcome back. We're here with Betty Martini, myself Jon Baum and Dr. Russell Blaylock. We were talking about the hypothalamus and how it's affected by aspartame. Dr. Blaylock?

DR. BLAYLOCK: Yes, basically what we're talking about is the blood brain barrier protecting the brain against these things that are in our diet and what I was showing is that when we measure the actual brain level of these chemicals, they're passing right through the barrier. We know that there are areas of the brain which have no barrier and that these substances can enter through there and concentrate at very high concentrations and this is not just theoretical but we measure the actual levels in these parts in the brain. The hypothalamus is so important in controlling our endocrine system that has to do with thyroid function, adrenal gland function, reproductive function, growth, so this is a very important area of the brain and we know that phenylalanine can severely alter that and that's one of the components of NutraSweet. We

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know that the excitatory type transmitter is critical in that area of the brain so any alteration in its concentration, for example aspartic acid in NutraSweet can alter that function in the hypothalamus and as I said it affects the autonomic system as well and there may be some important connection between the accumulation of these chemicals in the hypothalamus and sudden cardiac death and that's something that I'm researching for this new book that I'm working on at the present time.

JON BAUM: What is the connection between aspartame and MS?

DR. BLAYLOCK: Well, what we know about MS is during the periods of exacerbation, that is when the symptoms get worse, the barrier system around the parts of the brain that contains the nerve fibers, that is the myelin, this tends to break down. When that breaks down any substance in the blood can enter that part of the brain so that if your blood has high concentrations of phenylalanine, or aspartic acid and methanol, it's going to seep through these holes or openings in this barrier system and go directly into the damaged areas of the brain and greatly aggravate it. A person may have what we call subclinical MS. That is they're not even aware they have it. When they drink NutraSweet they'll develop all of the symptoms of full blown MS and become deathly ill. There's some evidence that NutraSweet in a person that consumes a large concentration can develop an MS-like syndrome, that is they develop a lot of the symptoms of MS that is purely due to the toxic affects of the components of NutraSweet.

BETTY MARTINI: Dr. Blaylock, we have just been flooded with complaints from pilots. Three American Airline pilots that were heavy users of aspartame have died. One just recently had a stroke and some have said that pilots affected by disorientation, blindness, vertigo and other neurological symptoms are in fact suffering from hypoglycemia. Is that true?

DR. BLAYLOCK: Well, this is something that I had explored early on that really was not being paid any attention to was the connection between hypoglycemia and aspartame toxicity, and what we find is that all exitotoxins, their toxic effect is greatly magnified in the presence of hypoglycemia. For instance let's say a pilot is trying to make a schedule, he skips breakfast instead he has a diet cola with NutraSweet. His blood sugar is going to be low but he would be essentially asymptomatic or just maybe feel a little hungry or slightly weak from it but with that hypoglycemia in the presence of NutraSweet he would develop a full blown syndrome of exposure to NutraSweet with disorientation, blurred vision, confusion, may have vertigo, that is the sensation of dizziness. All of these things may become full blown in the presence of hypoglycemia that may be the connection between the two. There's also evidence that NutraSweet itself may trigger a hypoglycemic reaction so that at that point if the pilot was to drink NutraSweet, it could induce hypoglycemia and again that would compound the toxic effect the of NutraSweet. So that could be the connection there.

BETTY MARTINI: Is it depleting glucose in the brain? Is that how it works?

DR. BLAYLOCK: Yes, it's denying glucose to brain cells and of course glucose is the primary fuel for the brain and without glucose most people would quickly lapse into a coma. So it's very important that the blood sugar falls in low or even moderately low levels in the presence of a neurotoxin like one of these exitotoxins. It can produce rather profound confusion, disorientation and visual difficulties and of course they're at a very high susceptibility to seizure

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at that point, so if the blood sugar is low and they're taking in something that we know lowers the seizure threshold, they are at a very high risk of developing seizures. So I think that to allow pilots to continue this practice is extremely hazardous considering that they are responsible for hundreds of people on the plane, you know that's just irresponsible.

BETTY MARTINI: How about the wood alcohol and the altitude. Does the altitude play a part in this?

DR. BLAYLOCK: Well, the wood alcohol of course is a very powerful neurotoxin and we know that it's especially toxic to the optic nerves and what happens in the case of NutraSweet is that it's an esterified methanol, that is, it's what binds the phenylalanine to the aspartic acid but once in the body it quickly breaks down so that it accumulates directly in the tissues and can produce significantly high levels within the tissues. So that would affect the pilot's vision. We don't really know the additive affect of phenylalanine with the neurotoxin methanol and aspartic acid because we do know from other experiments that neurotoxins tend to have additive effects when they're combined so to put three neurotoxins into one compound is going to greatly magnify its toxic effect much more so than the individual compounds themselves. So any altitude change, of course change in the oxygen content, anything that's going to change the ability of the neuron to produce energy is going to magnify the toxic effect of these compounds.

JON BAUM: Dr. Blaylock, while we're on this subject we only have a couple of seconds left in this segment, but how does the body know to deplete its glucose supply?

DR. BLAYLOCK: How does it know when it's depleted?

JON BAUM: No, how does it know to deplete it?

DR. BLAYLOCK: Well, it's just part of the natural metabolism but recently what's important that we found out is that caffeine greatly magnifies the symptoms of hypoglycemia so that you can have even a moderate lowering of your blood sugar in the presence of caffeine and you'll have severe hunger, severe disorientation and confusion and jitteriness, nervousness. The way it does that is that it stimulates the adrenal glands to secrete ephedrine and norephedrine, two compounds that are produced by phenylalanine that's found in NutraSweet. So that the NutraSweet may be doing the same thing in that it makes even moderately low hypoglycemia quite severe in terms of the symptoms.

JON BAUM: So you're going to have the effects of the ephedrine and norephedrine as well?

DR. BLAYLOCK: Right, and that's what produces most of the symptoms that we associate with hypoglycemia is that secretion, so you're artificially doing that by raising the phenylalanine levels in your blood.

JON BAUM: O. K. Betty do you have a quick question for Dr. Blaylock? We're going to go on a break in about a minute.

BETTY MARTINI: Well, we'd like to know, are there other conditions that would make one more susceptible to the adverse effects of aspartame?

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DR. BLAYLOCK: Well, we know that there are a lot of different conditions that occur every day, for instance, let's say a person is having some problem with the different electrolytes in their blood and their sodium content for whatever cause. Maybe they've had a fever or haven't been drinking enough water; that makes them more susceptible to seizures. If they've skipped meals and have hypoglycemia they're more susceptible to seizure. They could have a silent lesion in their brain for instance, a scar from an old injury when they were a child or at birth, they could have cavernous a.v. malformations which is generally a lesion you wouldn't even know you had but if you're exposed to NutraSweet it could precipitate a seizure in all of those conditions.

JON BAUM: Dr. Blaylock, we're going to take a break right now. Thank you very much.

DR. BLAYLOCK: You're welcome.

(BREAK)

JON BAUM: We're back, with Mission Possible Radio. Our guest is Dr. Russell Blaylock. I'm Jon Baum. We have Betty Martini on the line with us.

BETTY MARTINI: Jon, you know I think our listeners at this point realize how serious this problem is, so I'd like to again give this number where they can get Dr. Blaylock's book. It's a wonderful book, "Exitotoxins: The Taste that Kills," and if you're on the internet system...

JON BAUM: Let me give the website real quick.

BETTY MARTINI: Alright.

JON BAUM: We have a web site [www.aspartamekills.com](http://www.aspartamekills.com) and if you go to that web site you'll see Dr. Blaylock's book right on the top. All you have to do is click on that book and you'll be taken to Mission Possible Bookstore We'd appreciate it and you can also call an 800 number. Betty?

BETTY MARTINI: OK, and that is 1-800-643-2665 and now we want to get into an issue that is really serious, it is the one about seizures and aspartame. We know that on the FDA report there are four different types of seizures triggered by aspartame that are documented by the FDA. We know that a pivotal study done on monkeys said five of them had grand mal seizures and one died. However with industry experimental results seems to indicate that aspartame doesn't precipitate seizures. So, what about humans Dr. Blaylock?

DR. BLAYLOCK: Well, the thing that's interesting about a lot of these studies is that most of them were done on rats or mice and rats and mice metabolize phenylalanine and aspartame much different than humans do. Humans mostly will have an elevated phenylalanine levels in the blood, whereas the mice and rats will develop a different amino acid, tyrosine, so that makes a lot of difference in experimental results. The other thing is that rats require a two time higher dosage and mice a seven times higher dose of aspartame than would humans to produce the same increase in plasma phenylalanine. So this means that humans are seven times more sensitive than mice and two times more sensitive than rats to aspartame seizure potential. So that makes a lot of difference. The other things is that humans are consuming this aspartame chronically, that is every day, several times a day, where most of these experiments were done giving a single dose or maybe two doses of aspartame, so the human situation is a lot different. Also in humans they are consuming exititoxins in other forms, MSG, hydrolyzed

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vegetable protein. As I stated the additive effect of these things is much worse than is single exposure. The other thing that makes a lot of difference is the form in which you consume the aspartame. We know that liquid exitotoxins are much more toxic and much more likely to produce seizures than are solid forms, that is solid foods. Encapsulated aspartame is used in a lot of the experiments and it's poorly absorbed, only 50% of it is absorbed. So a lot of these experiments either by design or by ignorance of the various metabolic effects of aspartame are purposely or inadvertently not applicable to humans. The human cases, we have many, many clinical cases of seizures that are precipitated by aspartame products that are actually double blind studies not designed that way but, they end up double blind studies. So we have good evidence that in humans, aspartame causes seizures.

JON BAUM: Dr. Blaylock, I think you already answered this, is there a way to doctor experimental results so that you get the results you want, that is, fix the results to show that a dangerous compound is safe?

DR. BLAYLOCK; Sure, in the book I go through this in some detail, show some of the methods that's been used by people either who were paid by the companies to produce research that gave them the result they wanted, or just poor design of the research project had that result. You can throw away data, you can hide data, you can use special blocking anesthetics on the animals that are known to block exitotoxin effects, that's been done. You can feed high carbohydrate meals at the same time to help reduce the effects of it, as I said you can use an encapsulated form of aspartame that is poorly absorbed. There's just a lot of different ways that you could do it. Now one of the things about exitotoxins and seizures, recently it was found that the time of day that you feed these animals the exitotoxin made a lot of difference. For example when they fed them at 7:00 a.m. they had a significant increase in the number and intensity of seizure and much reduction in the seizures when given at 3:00 p.m. or 11:00 p.m. Nearly 70% of the animals died in status epilepticus, that is a seizure that won't stop and animals given these exitotoxins at 7:00 a.m. versus later in the day so that all sorts of variables can make a lot of difference in the sensitivity and how you can doctor things to get the results that you want.

BETTY MARTINI: Are there medical conditions that are completely without symptoms that can be precipitated by substances such as aspartame and MSG?

DR. BLAYLOCK: Exactly, for example in my book I give the case of a man who was drinking Crystal Light sweetened with NutraSweet which seems to be cropping up a lot and I don't know what it is about Crystal Light but we have certainly a lot of seizures are being reported with the use of that compound, I mean that particular substance. But in this man he had an abnormal condition of his brain which was a little abnormal vein deep in his brain which in most people you wouldn't even know you had it and could go through life never having a single symptom, but he was consuming, at that point, a large amount of Crystal Light sweetened with NutraSweet and he developed a grand mal seizure. When this lesion was found it was not necessary to be surgically treated because it was a benign condition. All they did was take him off NutraSweet and the seizures cleared up. There are a lot of conditions like this. You could have scars in your brain and for instance during a difficult birth sometimes it will produce a small scar in the brain that may be completely without any symptoms and you'd never know

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you had it, but if you were exposed to something like NutraSweet which lowers your seizure threshold, out of the blue you'll have a seizure. Now, these are the types of things that we don't know beforehand that makes certain groups of people highly susceptible to seizures. And this may be happening in some of the pilots. They may have lesions in their brain that no one would have any way of even knowing it was there, until they're exposed to NutraSweet under these conditions, and then they have full blown seizures.

JON BAUM: I believe an acquaintance of mine came by my office and told me about a horrific experience he had with one bottle of Crystal Light, and he was driving home on Route 66 and started having convulsions. He was lucky he pulled his truck over.

DR. BLAYLOCK: I don't know what it is about Crystal Light, whether they use a higher dose or what but it certainly crops up a lot. Another interesting story I had, I did a radio program in another city and I was talking to the station manager and he said while we were talking before the program, he said you know I've been on a diet, and I'm using NutraSweet, and he said I've had a lot of problems with my memory, I get disoriented, confused, he said "Do you think it could be that?" And of course I took him off of it and his condition cleared up. But you know, this is just so common. These symptoms are the most common symptoms reported to the FDA and we're talking about thousands and thousands of complaints around the nation every year and most of them have to do with the nervous system. I catalogued them according to their system in the body and in fact by far the majority of the symptoms are in the central nervous system complaints of business!

JON BAUM: I just got passed a note that says that both Nutra System and Jenny Craig Diet Plans use Crystal Light as a water substitute, do you know anything about that?

DR. BLAYLOCK: I have heard that some of the diet systems are advocating Crystal Light and I shudder when I see that. I think anyone who is going to go on a diet and take NutraSweet products, you are putting yourself at the maximum risk. If you are on a low calorie diet that lowers your blood sugar then that greatly increases your chances of having a seizure, cardiac problems or neuro-degenerative changes in your brain. I think that's very hazardous.

BETTY MARTINI: Dr. Blaylock of course, we are flooded with complaints day and night and you're right they're neurological, central nervous system problems. You were mentioning Crystal Light and we get so many complaints on it, it's interesting that one of them came from an actress who had to advertise Crystal Light and she said she could hardly get through it, she had so many gastrointestinal complaints and we also seem to get a lot of them on Diet Kool Aid. These powders that are mixed with aspartame as if it's just chemicals and aspartame and they seem to be the top complaints of products like this but, Crystal Light is right up at the top.

DR. BLAYLOCK: Well, it may be that in both cases Kool Aid and Crystal Light is because people drink such large volumes. Some of the people I've talked to that's had Crystal Light problems, it's a drink that you can drink a lot of. You know a Diet Cola, you may not drink the volume that you would drink of Crystal Light or of Kool Aid. Children are particularly susceptible with Kool Aid and there's special ADD patients who have had just horrendous problems with NutraSweet that cleared up once they got off of it so, the mothers need to really be careful about those two

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drinks and I think it's because the people drink a lot larger volume and therefore are getting a higher concentration of the NutraSweet than they would in diet colas or other forms.

JON BAUM: Dr. Blaylock, we touched lightly on ADD and ADHD. What are learning disorders that aspartame can aggravate or even cause?

DR. BLAYLOCK: Well, this is something that's of a lot of concern to people that particularly work with ADD children and ADHD which is the hyperactive form of Attention Deficit Disorder. One of the persons involved is Dr. Keith Connors who has written the book called "Feeding the Brain: How Foods Affects Children." In this book he talks about a four year old child who was drinking some aspartame sweetened root beer and just became berzerk. The child was hyperactive, violent, complaining of headaches and the doctor suggested to stop the NutraSweet sweetened root beer. The mother took it away, the child just returned to normal, pleasant, normal mentation, no headaches and she was kind of skeptical so she decided just to let this child start drinking it again. She did and the same thing happened. He gives case after case like this which if you examine what we're talking about is actually doing double blind studies in single individual cases which demonstrate quite clearly that the only variable is the NutraSweet. So this is producing some ADHD type problems that are very clear. Now one of the studies that was done, a two part study by Freider and Grimm is an Israeli study at the University there, tried to determine what was causing some of these problems with mentation. They fed pregnant mice an exitotoxin, and they found that the offspring had a normal appearing learning for simple things but for complex learning they were severely impaired. And when they studied the brains to see why, they found out that the neurotransmitter called acetyl choline had been reduced 80% and remained reduced throughout the entire childhood period of that animal. So what we're seeing is a profound change in the chemistry of the brain of children that are exposed to these exitotoxins while they're still inside their mother during the developmental period. Subsequent studies, one in Neuroscience Behavioral Review in 1993, found that nutrition was probably the single most important environmental influence on the development of the brain in the fetus and another study in 1995 in BioMedicine and Environmental Science found that these exitotoxins severely effect the hypothalamus in newborn babies so that the wiring or how all these different neurons connect to one another may be altered and would be altered permanently so that the child's hypothalamus would not work properly throughout the rest of their life, and this can effect immunity as well, so that the immune system is totally altered throughout the rest of their life. Another interesting study in children found that when pregnant mothers were fed glutamate and other exitotoxins they had a dramatic increase in free radical formation in the offspring and that continued all through adolescence. It increased free radical formation 56%. That's damaging the brain cells, throughout all that period. So we have a multitude of research papers that have been done and studies that have been done that shows these exitotoxins have a profound damaging effect on the development of the brains of newborns. Even when these children are exposed to it after birth, they have severe changes in their brain and many of these things are not reversible so pregnant women drinking NutraSweet may be doing enormous amounts of damage and we've known that ironically the phenylalanine from NutraSweet in the mother's blood concentrates inside the blood of the baby two fold, that is the level inside the baby's body is twice as high as it is in the mother, and that pregnant women actually have higher concentrations than non-

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pregnant women so this baby's getting an even higher concentration of this brain-toxic chemical. The same thing can happen with glutamate and aspartate. They are also transferred into the baby in high concentrations. So we have good evidence that drinking Nutrasweet and exposing the child's brain to these excitotoxic substances can produce significant alteration in the brain formation.

BETTY MARTINI: I'm glad you went into that Dr. Blaylock. I was about to ask you some questions about it. Dr. Louis Elsas testified before congress that aspartame is a neurotoxin and a teratogen that triggers birth defects and even pediatric genetics and there is no warning on aspartame and that's almost criminal because we've gotten many complaints from mothers who said they didn't know and they'd lost as many as seven babies using diet drinks. But, I'd like to ask you, are the effects of excitotoxins reversible?

DR. BLAYLOCK: Well, generally what we find is that there's two types of effects by excitotoxins, one is with massive doses it will kill the cells, that is it will kill critical areas of brain cells particularly in the hypothalamus. Once they're gone, they're lost. The second effect is what we call the physiological effect, that means it alters how the cell functions but if you stop the toxin, the cell can recover and return back to normal and we've seen that clinically, particularly in children in which they develop this severe violence and hyperactivity and uncontrollable behavior, that if you stop the NutraSweet, they return to normal. They're nice, pleasant children without headaches who can learn normally, so a lot of these things are reversible. and we also know that if these children would continue to consume NutraSweet over long periods of time it can become permanent. There have even been cases of children that need to be institutionalized because of prolonged exposure to high concentrations of aspartame. So it's critical that mothers, if they're pregnant and they're drinking Nutrasweet to stop now. If they're letting their children have it, to stop now. It's just something so critical they can't wait, they need to stop it now. They can't wean off of it, they can't procrastinate about it, they need to stop it right now.

BETTY MARTINI: I know that we don't have too much time left and I wondered if Dr. Blaylock, you could touch on one of the breakdown products diketopiperazine, not too many people realize that aspartame is a drug and that it breaks down into a witches brew of toxins and that it did in lab animals trigger astrocytomas in rats.

DR. BLAYLOCK: In fact that was the first red flag that came up and this experiment was done by G. D. Searle Company. I discuss that in some detail in my book, how all of this came about. But what was interesting was that their own laboratories showed that there was a tremendous increase in brain tumors in the experimental animals exposed to NutraSweet and that it was dose related. The higher the dose, the more brain tumors. There was a forty-seven (47) fold increase of brain tumors in their mice. The longer the mouse was exposed to it, the higher the incidence of tumors. The older it became, the more likely that a tumor would develop. I have received numerous phone calls and letters and e-mails from young women all over the country who have been heavy NutraSweet users who have astrocytomas. There's an unexplained increase in astrocytomas in the United States and the American Board of Neurological Surgery and the Tumor Registry have no idea why. Dr. Olney, John Olney, gave a news conference in which he tried to explain it but unfortunately I don't think enough people understood that

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importance attached to this news conference. And what they need to do is look at the Jerome Bressler Report which is a government report of the research that was done in this area. As Betty says, what happens in NutraSweet the longer it sits in that can or baked goods, it is broken down into diketopiperazine which is a cancer causing substance and it is thought to be the cause of the brain tumors, it's related to another substance that we use to induce brain tumors in experiental animals. So, if you read the book, I tell the whole story of the Bressler Report, the incidence of brain tumors and how they manipulated the results. It's an interesting story but it's also critical for that reason to avoid NutraSweet.

JON BAUM: Dr. Blaylock, we only have a few seconds left, exactly thirty, and I want to thank you for being on our show. I know your time is valuable. I want to thank Betty Martini from Atlanta and can we bring you on another time.

DR. BLAYLOCK: I'd be glad to.

JON BAUM: Thank you very much.

DR. BLAYLOCK: And I appreciate the opportunity.

BETTY MARTINI: Thank you Dr. Blaylock.

DR. BLAYLOCK: Thank you Betty.

JON BAUM: This is Jon Baum from Mission Possible Radio, we'll be back here next week, not sure who the guest is going to be. We were also on the internet at [www.aspartamekills.com](http://www.aspartamekills.com), and all you have to do is hit the live feed and we thank our internet listeners. Good night.

## Diabetics

Aspartame is allowed as a free exchange for most diabetics. H.J. Roberts, M.D. currently studies complications associated with aspartame in diabetics at the Palm Beach Institute for Medical Research, West Palm Beach, Florida. In response to a nationwide survey, he encountered the following problems with diabetes related to aspartame:

- aspartame precipitated clinical diabetes
- there was noticeable poorer diabetic control in insulin dependent diabetics and diabetics using oral drugs to regulate insulin
- he recorded more frequent hypoglycemic reactions
- he cited aggravation of diabetic complications, especially retinopathy, cataracts, neuropathy, and gastroparesis

Dr. Roberts believes that diabetic reactions are due to phenylalanine excess, altered neurotransmitters, the effects of methyl alcohol, and an associated weight gain.

"The need to reevaluate the safety of aspartame in diabetics is urgent," said Roberts.

"Especially during pregnancy and childhood. Its use by patients with symptomatic reactive hypoglycemia and by close relatives of diabetics should be discouraged."

## **Documents**

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Interview: Dr. Blaylock

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## Health

The FDA has had their own list of aspartame symptoms for several years. As a matter of record, the FDA's list of Symptoms for Aspartame is dated September, 1991. At this time, the FDA actually flagged these following symptoms on the list:

- 201 symptoms reported for other Neurological
- 174 Grand Mal Seizures
- 92 Other
- 84 Local Swelling
- 30 Unspecified
- 26 Petit Mal Seizures
- 22 Nocturnal
- 10 Simple Partial Seizures
- 4 Deaths
- 4 Complex Partial Seizures

The distribution was based on 5422 records and 8001 occurrences of symptoms.

By 1991, the FDA had received over 5,000 complaints against aspartame, 85% of all complaints ever registered with the FDA. As of 1998, there are over 10,000 complaints against aspartame in FDA files. Prior to 1987, four deaths associated with aspartame were recorded with the FDA. There are only six documented complaints filed against saccharin. A total of SIX complaints in over 100 years of saccharin use.

### **Adverse reactions and side effects of aspartame include:**

#### Eye

- blindness in one or both eyes
- decreased vision and/or other eye problems such as: blurring, bright flashes, squiggly lines, tunnel vision, decreased night vision
- pain in one or both eyes
- decreased tears
- trouble with contact lenses

## Interview: Dr. Blaylock

- bulging eyes

### Ear

- tinnitus - ringing or buzzing sound
- severe intolerance of noise
- marked hearing impairment

### Neurologic

- epileptic seizures
- headaches, migraines and some severe
- dizziness, unsteadiness, both
- confusion, memory loss, both
- severe drowsiness and sleepiness
- paresthesia or numbness of the limbs
- severe slurring of speech
- severe hyperactivity and restless legs
- atypical facial pain
- severe tremors

### Psychological/Psychiatric

- severe depression
- irritability
- aggression
- anxiety
- personality changes
- insomnia
- phobias

### Chest

- palpitations, tachycardia
- shortness of breath
- recent high blood pressure

### Gastrointestinal

- nausea
- diarrhea, sometimes with blood in stools
- abdominal pain
- pain when swallowing

### Skin and Allergies

- itching without a rash
- lip and mouth reactions
- hives

## Interview: Dr. Blaylock

- aggravated respiratory allergies such as asthma

### Endocrine and Metabolic

- loss of control of diabetes
- menstrual changes
- marked thinning or loss of hair
- marked weight loss
- gradual weight gain
- aggravated low blood sugar (hypoglycemia)
- severe PMS (Post Menstrual Syndrome)

### Other

- frequency of voiding and burning during urination
- excessive thirst, fluid retention, leg swelling, and bloating
- increased susceptibility to infection

### Additional Symptoms of Aspartame Toxicity include the most critical symptoms of all

- death
- irreversible brain damage
- birth defects, including mental retardation
- peptic ulcers
- aspartame addiction and increased craving for sweets
- hyperactivity in children
- severe depression
- aggressive behavior
- suicidal tendencies

### Aspartame may trigger, mimic, or cause the following illnesses:

- Chronic Fatigue Syndrome
- Epstein-Barr
- Post-Polio Syndrome
- Lyme Disease
- Grave's Disease
- Meniere's Disease
- Alzheimer's Disease
- ALS
- Epilepsy
- Multiple Sclerosis (MS)
- EMS
- Hypothyroidism
- Mercury sensitivity from Amalgam fillings
- Fibromyalgia
- Lupus

Interview: Dr. Blaylock

- non-Hodgkins
- Lymphoma
- Attention Deficit Disorder (ADD)

Sources:

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## Phenylketonuria

Every product containing aspartame carries the warning label: Caution: Phenylketonurics. Phenylalanine causes mental retardation in individuals with Phenylketonuria or PKU, and phenylalanine makes up 50% of aspartame. There are approximately 20 million carriers of the PKU gene at risk who do not know it. PKU should be as familiar to the public as diabetes, but the dangers are not commonly known.

Phenylketonuria is a disease characterized by an inborn error of metabolism of the amino acid phenylalanine. In affected individuals, the disease is present from birth. It is not clinically recognizable at first. Progressive mental retardation occurs from the age of a few weeks. Irritability and vomiting are early symptoms, and dermatitis may appear at five or six months of age. Affected children have fairer complexions than their unaffected siblings, and can become so retarded they often require institutional care. Victims frequently develop epilepsy. Could SIDS be a final fate? Research hasn't considered this yet.

Phenylketonuria is inherited on a recessive basis, meaning both parents can be unaffected, yet carry the trait. There is a one-in-four chance of producing an affected infant every pregnancy. In 1980, one out of every 16,000 live births were Phenylketonuric within the United States.

How do carriers of the PKU trait react to high doses of phenylalanine in diet products? Apparently, no one knows. As Grave's Disease, maybe? Migraine headaches? PMS? Depression? Seizures?

Treatment for Phenylketonuria involves a strict preventative diet - a low to no phenylalanine diet. That means no aspartame! But, what if you don't know you're PKU? Or what if you don't know your two month old baby is PKU? What if you are pregnant and have no clue if the fetus is PKU? What if you are adopted and have no idea what your genetic history may be?

Many common foods such as milk and bananas contain phenylalanine because phenylalanine is a naturally occurring amino acid. A small amount of phenylalanine is required for normal growth, but no more than the small amount found naturally in food. Diet products with aspartame don't count as a source of the 'naturally occurring amino acid' because their source of phenylalanine is not a direct food source, but a laboratory replica of the natural phenylalanine molecule. With over 5,000 products containing aspartame, the average consumer has a better-than-average chance of receiving too much phenylalanine.