Killing Me Sweetly. . . . How Safe is Aspartame?

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Evelyn Blake's downhill spiral began in 1994 when her son Jack moved in to model her home. Since both were overweight he suggested they diet together. They switched to diet sodas in the summer heat, and began using Equal as a sugar substitute.

"After about four months I began feeling nervous and uneasy," Evelyn recalls. "My heart was beating so irregular I wondered if I was having a heart attack. My nurse friend suggested I have tests done, which I put off. Then one night I woke with this very strange feeling, as if I was in a zombie state. I felt as if my tongue was swelling, my teeth clinched tight…."

She began to shiver, and by the time she'd reached her son's room her body shook uncontrollably and she couldn't talk. The frightening incident subsided after about 20 minutes and they decided against an emergency room visit. Soon afterwards EKG and blood work was done: all normal. "Not making any connection, we continued on our diet and used Equal in everything -- coffee, breads, cereal, salad – and the seizures got worse."

Though millions of people sip diet sodas, ingest yogurt lite and sugarless Jello, and stir Nutrasweet into their coffee without noticeable side effect, Evelyn Blake's ordeal is only one of thousands of alleged "aspartame poisoning" complaints registered over the last two decades. By the Federal Food and Drug Administration's (FDA) own admission 73% of all food complaints are aspartame related, most commonly headaches, memory loss, depression, heart palpitations, and vision problems. Numerous others adamantly believe their prolonged use of aspartame is the root cause behind permanent nerve damage, brain lesions and tumors, and even untimely deaths of family members.

"Since many consumers may never make the connection between their maladies and aspartame intake, conceivably those complaints are only the tip of the iceberg," said Betty Martini, who heads Mission Possible International, which attempts to educate the public about aspartame.

Industry and FDA spokespersons point out that these accounts are “merely anecdotal,” “coincidental,” and “unscientific,” but the shear volume of accusations in itself continues to raise questions about aspartame’s approval process; the questionable independence of industry-funded research; the ethics of the revolving door relationships between FDA officials and industry; and a call for the reexamination of this chemical that is now found in grocery stores, on kitchen shelves, and in children’s lunch boxes.

Nutrasweet – along with Equal, Spoonful, Indulge, Equal-Measure, etc. – are brand names for aspartame, discovered by accident in 1965 when a chemist, James Schlatter, of G.D. Searle was testing an anti-ulcer drug: he happened to lick his hand and the rest is history. Originally approved for use in dry foods in July 1974, aspartame was put on hold several months later due to objections filed by neuroscience researchers and consumer attorneys.

When ingested NutraSweet breaks down into aspartic acid, a chemical found in the brain; phenylalanine, an amino acid; and methanol (wood alcohol) that is converted to formaldehyde, which in high levels can cause damage and blindness. Monsanto and the FDA argue that methanol is present in such small amount that it poses no health risks, and is broken down and harmlessly passed from the body. They also insist that except for people with the rare disease, phenylketonuria, aspartame is safe.

Dr. Russell L. Blaylock, Professor of Neurosurgery at the Medical University of Mississippi, explains in his book, *Excitotoxins: The Taste that Kills* (Health Press, 1994) that though aspartate (and glutamate in the chemically related substance MSG) are neurotransmitters normally found in the brain and spinal cord, when aspartate reaches certain levels – as when someone daily consumes a dozen diet sodas or aspartame packets in their coffee – it causes the death of brain neurons.

The risk to infants, children, and pregnant women are higher because the blood/brain barrier, which normally protects the brain, is not fully developed during infancy and childhood. Dr. Blaylock, and numerous other doctors and researchers, believe that long-term exposure to excitotoxins may play a part in diseases such as early onset Alzheimer's (now reaching epidemic proportions in the USA), Parkinson's (Michael Fox, former spokesperson for Diet Pepsi who reputedly drank lots of it, now has Parkinson’s at such an early age), Lupus, brain lesions, brain tumors, epilepsy, memory loss, multiple sclerosis, and some hearing problems.

Dr. John Olney, a neuroscientist at Washington University Medical Center in St. Louis, who has demonstrated the harmful effects of excitotoxins in animals and testified before Congress, believes that both glutamate and aspartate damage areas of the brain controlling endocrine functions leading to

obesity. Olney posits that the 30% increase in obesity in America in the past decade might be related to the increase use of aspartame

In the late 1970s, after the questionable early aspartame safety tests, the Universities Associated for Education in Pathology (UAREP) carried out an extensive audit. “While there were a few inaccuracies (in the original safety tests) there was nothing convincing to keep aspartame off the market,“ insists David Hattan, Ph.D., acting director of FDA's Division of Health Effects Evaluation. “The large body of animal and clinical research carried out in a controlled environment convinces me that aspartame is safe.”

But a number of his colleagues disagreed. During a Congressional investigation in 1985 to scrutinize G.D. Searle's aspartame safety tests, Dr. Jacqueline Verrett, a former FDA toxicologist, and FDA task force member testified that the tests were a "disaster" and should have been "thrown out." She believed the studies left many unanswered questions about possible birth defects and aspartame’s safety. Dr. Marvin Legator, Professor of Environmental Toxicology at the University of Texas, characterized them as "scientifically irresponsible and disgraceful" and "I've never seen anything as bad as Searle's."

Because of FDA budget limitations it’s standard procedure for the bulk of initial safety tests to be financed, designed, and carried out by the company with a vested interest in the product. The potential for skewed results is called into question when 74 out of 74 of industry-sponsored articles attested to aspartame's safety, while 84 out of 91 of the non-industry sponsored articles identified problems with the chemical.

“I’ll admit that there’s validity to these concerns, but it’s not unusual for industry to fund studies because they’re expensive and who else will?” counters a spokeswoman at Merisant Co. (G.D. Searle, the original makers of Nutrasweet, was bought by Monsanto in the 1980s. This past year, Monsanto sold Nutrasweet to J.W. Childs, and divested itself of Equal, which is now Merisant Co.) “The studies must follow very specific guidelines and protocols, and have independent reviewers…. It’s a disservice to the fine scientists involved whose reputations are besmirched by aspartame detractors.”

And what’s to keep adverse industry test results from disappearing altogether? According to a newly come forward reliable source (who chose to remain unnamed but has signed a sworn affidavit), G.D Searle in the early 1980s conducted aspartame research in five communities in Central and South America, the groups were told they were ingesting a papaya extract. (Monsanto’s PR department denies that this research was ever undertaken). By the end of these 18-month studies, the source recalls from translating the reports from Spanish into English that many subjects experienced grand mal seizures,

damage to the central nervous system causing muscular and neural instability, hemorrhaging, brain tumors, and radical alterations in behavior.

"When I finished the project, I was told to destroy all my records and copies…. If the report of those studies had reached the FDA, there is no way they could have approved aspartame," the source said. "Imagine my surprise when I found out soon after that aspartame is being consumed en masse! I urged my family and everyone I knew not to use anything containing aspartame because as I called it 'it would make their brains into mush...'"

The late Dr. M. Adrian Gross, former senior FDA toxicologist, stated in his testimony before Congress, "Beyond a shadow of a doubt, aspartame triggers brain tumors" and "therefore, by allowing aspartame to be placed on the market, the FDA has violated the Delaney Amendment," which makes it illegal to allow any residues of cancer causing chemicals in foods. His last words to the Congress were: "And if the FDA itself elects to violate the law, who is left to protect the health of the public?"

The cancer causing agent referred to above is diketopiperazine, or DKP. James Bowen, M.D. wrote "As it (DKP) breaks down, aspartame creates, and with the intact aspartame molecule you have the two greatest brain tumor
carcinogens discovered by science thus far responsible for the massive brain tumor epidemic we now witness…." In the studies, some of the rats developed pituitary adenomas, astrocytoma, and glioblastoma, a rapidly spreading brain tumor.

So concerned was G.D. Searle about the toxic DKP that it's mentioned several times in an early 1970 internal memo distributed by Herbert Helling: "…My prime concern at this time is with the production of the DKP and our lack of complete toxicological data on DKP if SC-18362 (aspartame's chemical code) went (broke-down) out completely to DKP. We then must consider how much DKP could be formed from the time the system is converted to a wet system to the time of consumption allowing for maximum likely abuse…."

Helling goes on to advise his colleagues: "…At this meeting, the basic philosophy of our approach to Food and Drug should be to try to get them to say 'yes.' and to rank the things that we are going to ask for so that we are putting first those questions that we are likely to get 'yes' to, even if we have to throw some in that have no significance to us other than putting them into a yes-saying habit…. It would also help if we can get them to get the people involved to do us any sort of favor as this would also help bring them into a subconscious spirit of participation."

"Sounds like the tobacco fraud all over again. But this time, it's the drug industry, and it's big," said Attorney Ed Johnson. "When the class actions (lawsuits) hit, and they will, I predict that they'll rival the tobacco litigation we have seen in the past few years."

When Johnson, former U.S. Department of Justice Attorney**,** who for the last 10 years has served as President & CEO of one of the larger lawfirms in San Antonio**,** saw an expose in December l996 on "60 Minutes" pointing out the alarming and significant rise in brain tumors in the United States is in direct proportion to the rise in the use of aspartame, he never touched the substance again.

But the damage was already done. Diagnosed with a pituitary adenoma, he underwent two life-threatening surgeries to remove the tumor -- which he believes was caused by his heavy ingestion of Diet Coke and Nutrasweet over two decades -- and daily radiation therapy for two months. This year at the age of 55, Attorney Johnson, had to retire from practicing law due to the inability to input or retain memory data.

"These past couple years I began researching the dangers and symptoms of aspartame," Attorney Johnson said, "and I have personally found an increasing number of people who have had brain tumors and brain surgeries…."

Aspartame tests in the U.S.A continued until July 18, 1981 when FDA Commissioner Dr. Arthur Hull Hayes, Jr. disregarded Section 409(c)(3) of the Food Drug and Cosmetic Act (21 U.S.C. 348) -- which states that a food additive should not be approved if tests are inconclusive, overruling six of the nine scientists on two agency review panels who felt the studies of brain tumor in rats had been inadequate. Applying an "acceptable daily intake" (ADI), the FDA approved the chemical for use in dry goods, and then raised the ADI in 1983 to enable aspartame in beverages despite the consensus of the National Soft Drink Association that aspartame was too unstable for such use.

In subsequent years, $30 million to $40 million annually was blitzed into advertising by Nutrasweet Co. alone, and ads – featuring the likes of Bill Cosby, Rachel Welch, Joe Montana, and Geraldine Ferraro -- by diet soft drink manufacturers and other companies employing the chemical, pushed that figure past $100 million a year, quickly making Nutrasweet a household word.

Soon after, complaints to the FDA began rolling in: headaches, dizziness, anxiety, depression, memory loss, joint pain, vomiting, heart palpitations, slurred speech, seizures, brain tumors, comas, and even deaths attributed to aspartame.

The FDA took "some of these early reports quite seriously" and Monsanto performed follow-up studies. But, according to the principals of science "if test results cannot be reproduced in a controlled setting then you cannot preclude other factors that might have caused seizure expressions," explains

Hattan, who declares he has consumed copious amounts of aspartame with no ill effects. "I think that many of the symptoms attributed to aspartame are actually caused by something else in the individual's environment…"

Evelyn seizures got worse, racking her body on a regular basis, sometimes twice a day. She recalls entering into a "zombie stare... looking but not seeing" where she felt as if her body "was attached to an electrical current," her heart racing. After an episode, she went limp and she was unable to move.

More EKG, EEG, and blood work tests followed, but the doctor could only determine low blood pressure and a slight thyroid problem and sent her home with the appropriate pills. Meanwhile, her hair started falling out by "the handful." Temporary relief finally arrived when she visited her brother in Georgia where she skipped her diet –using Equal – and for three weeks had no attacks or seizures and began to recover.

When she returned home, there was the Equal and the nightmare revved up again. "I thought it might be stress from the remodeling, and other duties… I was losing weight, my memory was getting so bad I couldn't remember where I was going when I got into my car. My eyesight suddenly got worse. I was afraid of being alone, never knowing when the next seizure would hit! The doctors could find nothing wrong with me."

Within several years of aspartame deluging the market a number of FDA and government officials left their posts and took jobs closely linked to the food, beverage, and Nutrasweet industries. While this revolving door between industry and government is not unusual. Shortly after pushing aspartame's approval, Dr. Arthur Hull Hayes left the FDA under a shadow of improprieties and became a consultant—at $1000 a day—with Burston-Marsteller, G.D. Searle's public relations firm. For two decades Hayes has refused to speak with the press.[1]

Wayne Pines, Hayes' former top spokesman, previously had joined the firm. In July 1986, Anthony Brunetti, a FDA consumer product officer who drafted the 1983 notice approving Nutrasweet's use in soft drinks, joined the Soft Drink Association as a science advisor.

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[1] One director of Burston-Marsteller is Edward N. Neys, also a director of the G.H.W. Bush-connected Barrick Gold Corporation. George H.W. Bush serves as a paid advisor for Barrick Gold. Barrick directors include: Brian Mulroney, former PM of Canada; Edward Neys, former U.S. ambassador to Canada and chairman of the private PR firm Burston-Marsteller; former U.S. Senator Howard Baker; J. Trevor Eyton, a member of the Canadian Senate; and Vernon Jordan, one of Bill Clinton's lawyers.

Documents released by former Sen. Howard Metzenbaum (D.,Ohio) disclosed that in the late 1970s Samuel Skinner and William Conlon, two senior Justice Department prosecutors investigating criminal allegations against G. D.Searle & Co. for falsifying Nutrasweet safety test results, later joined the law firm of Sidley & Austin, which represented G.D. Searle during the lengthy criminal investigation. Mr. Skinner, who knew of the deadline, delayed pursuing prosecution thus placing G.D. Searle beyond the statute of limitations. He subsequently defected to Sidley & Austin in July 1977.

"The aspartame manufacturer has a lot of political influence, and when the FDA Director refused to allow aspartame on the market, he was replaced by one who would, and did…," said Attorney Ed Johnson, former Assistant U.S. Attorney under William S. Sessions (who went on to become the head of the FBI).

"Though it's against ethics laws for an FDA official to sit in on any action regarding a firm with which a they had any prior relationship," explained former FDA investigator, Arthur Evangelista, "there is nothing to stop federal officials from being influenced with promises of a position in a firm they are meant to be regulating."

Evangelista believes that influence pedaling is rife throughout the FDA, both directly and indirectly, via government PAC monies influencing politicians, which in turn use their influence on regulatory agencies. He recounts an incident where he recommended that two agricultural inspectors in Texas be criminally charged for abuse of power and cover-up. "My FDA supervisor requested the charges be 'toned down' and then sat on the report. Later, I found him at the computer not only re-writing the endorsement of prosecution, but also part of my investigative notes and the report itself!" Evangelista said. "He placed the final version on my desk for signature, and with an accompanying note, requesting I "destroy all previous copies".

As the revolving door continues to spin, the potential for conflict of interest within the government agency comes into question. In 1999, Dr. Virginia Weldon, Vice President for Public Policy at Monsanto (the parent corporation of Nutrasweet), was considered for the FDA's commissioner post. On June 14, 1999 retiring FDA Commissioner Michael Friedman became the Senior Vice President for Clinical Affairs at G.D Searle & Co.'s drug unit.

Donald Rumsfeld, once president of Searle Laboratories and Secretary of Defense under George W. Bush, along with Pres. Reagan, used their political clout to force the FDA to pass and "approve" aspartame.

How can the FDA effectively safeguard the public's health while being influenced from the corporations they are meant to regulate?

A case in point directly related to aspartame is that of stevia, a natural sweetener derived from a plant *Stevia rebaudiana Bertoni* consumed for centuries by indigenous tribes in Paraguay and Brazil. The leaves of the "honey plant", which spreads like mint and grow to about three feet, are 30 times sweeter than sugar. In its processed powdered form it's 300 times more potent.

In the 1980s, stevia was gaining popularity in the United States. Several companies, including Lipton and Celestial Seasonings, employed it as a flavoring agent. Rather than treating stevia as a natural plant with a long history of safe use -- theoretically exempt from the stringent research that a chemical/drug such as aspartame must endure, the FDA began confiscating commercial stevia stocks.

"They came in like we were holding dangerous contraband," recalls Lynda Sadler, President of Traditional Medicinals in Sonoma County, California. "They embargoed our finished and raw product. We were right in the middle of tea season and we suffered the loss of sales and inventory, not to mention warehouse space that took four years to clear out."

Sadler was not alone. "In 1991, FDA marshals unexpectedly arrived at my warehouse and announced they were seizing my inventory of stevia teas," recalls Oscar Rodes, president of Stevita (formerly Steviasweet: forced by the FDA to change their name because it contained the word "sweet"). "Since I did not have time to consult an attorney, they took all my inventory, and when I asked what they would do with the teas, they replied that they were going to burn it."

Seven years later Rodes was told by the FDA that he must eliminate the word "sweet" from all advertising material including Stevita's web page. He reluctantly agreed to do so, but he refused their request to stop selling books with stevia recipes. "As a result, the FDA seized all our inventory. Finally in desperation, in early May 1998, I notified the FDA that I'd stop selling the books in order to have my inventory released," Rodes recalls. "To my surprise, I received a fax informing that they were sending inspectors 'to witness the destruction' of the books. That was not my deal with them." The FDA agents arrived to burn the books, found themselves confronted by local TV station camera ready to roll, and they backed off."

These extreme actions prompted Sadler and others to form the Stevia Committee of the American Herbal Products Association, and to enter petitions with the FDA to prove stevia's safety. "Five years and $500,000 later," adds Sadler, "we could see that no matter what level of science or evidence was presented, it made no difference. The FDA was not going to treat stevia fairly."

Despite extensive testing of stevia in Japan in the 1970s with no noted side effects -- stevia constitutes almost 50% of Japans "artificial" sweetener market, and a dozen other Asian countries approved stevia -- the FDA still refuses to "file" submitted petitions citing more than 900 articles and

research chronicling stevia's safe use.

Referring to two controversial and never duplicated studies conducted by Purdue University biochemist Joseph Kuc in 1968, and another published in a Brazilian pharmacological journal in 1988, Linda Goosens, an FDA official for 30 years, said, "Studies have shown that stevia possibly has some deleterious effects (decreased fertility in mice), and until someone comes forth with a study of stevia's proof of safety as a food additive it will stay on the (FDA's) shelf."

Those in the herbal products market contend that because the stevia plant itself cannot be patented, Nutraweet, out to protect its aspartame interests in the nearly one billion dollar artificial sweetener industry, secretly pressured FDA officials to harass stevia users and ultimately to ban it. The former vice President of Public Affairs for Nutrasweet, Richard Nelson, in an article in Self Magazine (June 1997) dismissed it as "one of those urban myths."

But Nelson's denial is flatly contradicted by Jim May, owner of Wisdom of the Ancients herbal products in Arizona. “In 1984 the FDA in Phoenix said to me that there’s nothing wrong with using stevia as long as they didn’t get any complaints,” May recalls. “Later, I was called into the office, and the agent apologized and said that the Washington office demanded that we stop using stevia and he added that it was NutraSweet that tipped them off.”

“Stevia has been banned by the FDA simply because it has not been deemed safe,” said the spokeswoman at Merisant Co., “and it has nothing to do with Nutrasweet.”

“Before we allow any substance into the food supply,” said Hattan at the FDA, “we have rigorous series of tests that must be performed and they (the proponents of stevia) back off because there is no patent for stevia and it cannot enjoy any commercial exclusivity.”

This year, bolstered by opinions from toxicologist Ryan Huxtable of the University of Arizona in Tucson, and Douglas Kinghorn, professor of pharmacognosy at the University of Illinois at Chicago – both who previously publicly supported FDA approval of stevia -- the Center for Science in the Public Interest (CSPI) issued a statement that “although there is no evidence of harm to people, laboratory studies (in rats) of stevia have found potential cancer and reproductive-health problems…” and “Until those concerns are disproven, stevia should not be used by manufacturers in soft drinks, candy, or other foods.”

The FDA was forced through a legal loophole in 1995 to rescind its 1991 import ban against stevia leaves, extracts, and steviosides and allow it to be sold as a dietary supplement. Though consumers still won't find stevia on packaged food labels as a food additive, it’s sold among the

vitamins or cosmetic products in most health food stores, though they're not allowed to mention stevia's most remarkable quality: its sweetness.

"I am diabetic and alive today due to diet, exercise, and stevia. It doesn't effect my blood sugar except perhaps to reduce it, and I no longer have to use insulin," said Larry Hagman, J.R. of *Dallas* fame. "I use stevia all the time and give it away with recommendations of where to get it… I would never use aspartame again knowing how dangerous it is…."

For two decades the aspartame controversy continues to simmer, leaving respectable organizations with opposing verdicts. The American Diabetics, the American Academy of Pediatrics, the American Medical Association, and the Epilepsy Institute (though it is a matter of record that several of these organization have received donations from Nutrasweet Co.) endorse aspartame as safe. But hundreds of airlines pilots reporting adverse effects from aspartame, including grand mal seizures while in the cockpit, resulted in a dozen aviation publications, including *Navy Physiology, Planes & Pilot, Canadian General Aviation News, and Flying Safety,* warning pilots not to consume aspartame before or while flying.

"I am not denying these people's symptoms," says Hattan at the FDA, "but it is entirely possible that when patients stopped using aspartame they might also coincidentally have had remission of their symptoms."

Both the FDA's and Nutrasweet's categorical dismissal of the thousands of aspartame consumer complaints as coincidental, anecdotal or unscientific has not diminished the convictions of thousands of unpaid volunteers at Aspartame Victims and Their Friends; the Aspartame Toxicity Center (www.holisticmed.com/aspartame); an Aspartame Detoxification Center in Atlanta, Georgia run by Dr. Paula Rhodes; and chapters in dozens of countries of Operation Mission Possible (dorway.com) compiling aspartame related articles and personal accounts.

As of 1987, the last year that Nutrasweet publicized records, Americans consumed about 17,100,000 pounds of aspartame, with the number estimated to now have topped 25 million pounds. The chemical additive is now sold in dozens of other countries, with aspartame poisoning complaints now being fielded from around the world.

"I feel cheated by the government that would allow a poison like this to contaminate our society and our children," said Gary Fuller, whose doctor agrees that the seizures Gary experienced could have been induced by the 2-3 packets of NutraSweet in coffee, diet sodas, and aspartame-laced flavored

waters he consumed daily. “I think the FDA should take another closer and independent look at this poison in our food supply.”

Evelyn decided to try eliminating one by one all the foods was eating, but the seizures continued. “When I finally eliminated Equal, I never had any more ‘attacks’ or I seizures! Since I stopped Equal on September 13, 1997 my health has slowly improved: My eyesight and memory returned, my hair quit falling out, my blood pressure is good. My heart continues with an irregular beat, which my Cardiologist says only a pacemaker can correct.”

In the fall of 1997, after Evelyn had eliminated aspartame from her life, she called her son, who had moved back to Georgia, to tell him of her recovery. “He told me he had real bad headaches, had arthritis in his hands, down his neck into his back and was not able to work. He was on the verge of bankruptcy and was depressed. He told me later that he was considering suicide… As we spoke he was drinking a diet coke and said that he drank several a day. I told him to dump the diet sodas, quit using Equal…” Jack followed his mother’s advice and within weeks he was back to work.

“Because of Equal my life for four years was one living hell,” Evelyn said. “Can't someone do something about this unregulated chemically engineered drug called Equal/Aspartame that has affected thousands?”

Mission Possible International – www.dorway.com

Stevia Websites

http://www.stevia.net

http://www.wisdomherbs.com

http://steviaplus.com

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