SB2506

Measure Title:
RELATING TO FOOD.

Report Title:
Artificial Sweetener; Aspartame; Ban; Food

Description:
Bans the use of the artificial sweetener aspartame in food products.

Introducer(s):
ENGLISH (BR)

Current Referral:
HTH

LINDA LINGLE
GOVERNOR OF HAWAII

CHIYOME LEINAALA FUKINO, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
File:

Committee on Health

SB 2506, RELATING TO FOOD

Testimony of Chiyome Leinaala Fukino, M.D.
Director of Health

February 25, 2008
1:15pm

Department's Position: The Department of Health respectfully opposes the bill.

Fiscal Implications: None.

Purpose and Justification: The intent of this bill is to ban the manufacturing, holding, sale, or delivery of any foods that contain aspartame. The Department does not support this bill because aspartame is considered GRAS, generally recognized as safe, by the U.S. Food and Drug Administration (FDA). Aspartame is one of the most thoroughly tested and studied food additives the agency has ever approved. The agency reviewed more than 100 toxicological and clinical studies and confirmed that aspartame is safe for the general population.

On September 11, 2007, a new study of aspartame was conducted and concluded that aspartame is safe, even among its heavy users. The review, "Aspartame: A Safety Evaluation Based on Current use Levels, Regulations, and Toxicological and Epidemiological Studies," published in the September issue of the Informa Healthcare's *Critical Reviews of Toxicology*. Informa Healthcare is the oldest commercial journals publisher in the world, and one of the leading global academic publishers. The study reviewed more than 500 reports, including toxicological, clinical and epidemiological studies

dating from 1970's preclinical work to the latest studies on the high-intensity sweetener. Along with use levels and regulations data, an international expert panel from 10 universities and medical schools evaluated the safety of aspartame for people of all ages and with a variety of health conditions. The panel concluded that aspartame does not have carcinogenic or cancer-promoting activity; is safe at current levels of consumption; has no effect on behavior, cognitive function, neural function or seizures in any of the groups studied; is safe for use by diabetics and may aid diabetics in adhering to a sugar-free diet; and there is no evidence to support an association between aspartame consumption and obesity.

The review panel researched for 11 months reviewing past literature on aspartame, which was introduced in the food supply in 1981. Currently, aspartame is consumed by over 200 million people around the world and is found in more than 6,000 products including carbonated soft drinks, powdered soft drinks, chewing gum, confections, gelatins, dessert mixes, puddings and fillings, frozen desserts, yogurt, tabletop sweeteners, and some pharmaceuticals such as vitamins and sugar-free cough drops.

The Department understands that public health would be further served if it would concentrate its efforts on the food safety inspections of the regulated community, food recalls of adulterated foods, and not the monitoring of the removal of aspartame-containing foods, which are already considered safe.

Thank you for the opportunity to testify.

AMERICAN BEVERAGE ASSOCIATION

Senator David Ige, Chair
Senate Committee on Health

Monday, February 25, 2008
1:15 p.m., Conference Room 016

RE: SB 2506 - RELATING TO FOOD

Chair Ige, Vice Chair Fukunaga, and Members of the Committee:

The American Beverage Association has been the trade association for America's non-alcoholic refreshment beverage industry for more than 85 years. Formerly the National Soft Drink Association, ABA today represents thousands of beverage producers, distributors, franchise companies and support industries in Hawaii and across the country.

Aspartame – most commonly known as NutraSweet and Equal – is one of the most thoroughly tested ingredients of all time with more than 200 scientific studies confirming its safety. It was approved by the U.S. Food and Drug Administration (FDA) for use in food in 1981 and for soft drinks in 1983.

Since that time, aspartame has been reviewed and approved by regulatory agencies around the globe, including the European Union Scientific Committee on Food and the Joint Food and Agriculture Organization/World Health Organization (JECFA) Expert Committee on Food Additives. In all, regulatory agencies in more than 100 countries have reviewed aspartame and found it to be safe for use. The National Cancer Institute has also validated its safety for both over-the-counter use and use in food products.

Consumer research shows that low- and reduced-calorie foods and beverages have become part of the lifestyle of millions of men and women who want to stay in better overall health, control their weight, or simply enjoy the many low- or reduced-calorie products available.

Aspartame has helped provide calorie-conscious consumers with a wide variety of good-tasting, low- and reduced-calorie products that are easily incorporated into a healthful lifestyle. Diet soft drinks are the beverage of choice for millions of Americans who are seeking to reduce their calories without having to give up their favorite soft drinks. Currently, aspartame is found in more than 6,000 products and is consumed by over 200 million people around the world.

Further, studies have shown that foods and beverages sweetened with aspartame can be an effective "tool" as part of a weight management program. Researchers at Harvard Medical School have concluded that aspartame "is a valuable adjunct to a comprehensive program of balanced diet, exercise and behavior modifications for losing weight." And a recent review of aspartame by the British Nutrition Foundation showed that a diet including foods and drinks containing aspartame was effective in maintaining or losing weight without forgoing taste.

Diet soft drinks can also help adolescents with calorie consumption and teach them the importance of balancing calories consumed with calories burned. In fact, along with the beverage industry, the Alliance for a Healthier Generation, a join initiative of the American Heart Association and the William J. Clinton Foundation, developed School Beverage Guidelines that provide for "no- or low- calories beverages with up to 10 calories/8 oz." in high schools.

The American Beverage Association respectfully requests that the Committee hold SB 2506. Thank you for the opportunity to testify.

HESH GOLDSTEIN, MSNutr
"Health Talk" Moderator K-108 Radio
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TESTIMONY IN SUPPORT OF SB2506: TO BAN THE USE OF ASPARTAME

For Hearing in Room #16, 1:15 P. M. MONDAY, 02/25/08

PLEASE COPY AS COMMITTEE HANDOUT FOR THIS HEARING

TO: CHAIR DAVID IGE; VICE CHAIR CAROL FUKUNAGA; MEMBERS OF THE COMMITTEE

No doubt you will be lobbied by companies like Ajinomoto, Coca Cola, Pepsi and others to not ban Asparatme. You must not lose sight of the fact that their sole motivation for you to not ban Aspartame is money and profits and most definitely not the health of the people. We, the people of Hawaii, can only hope and pray that you will focus on our health and not corporate profits.

Aspartame is marketed as a "diet aid". The reality is that Aspartame causes the brain to stop producing serotonin, which results in feeling as though you haven't had enough to eat even when you are full.

75% of ALL recorded complaints received by the FDA were concerning Aspartame. Those symptoms complained about included headache, nausea, vertigo, insomnia, loss of control of limbs, blurred vision, blindness, memory loss, slurred speech, depression, hyperactivity, gastronomical disorders, seizures, skin lesions, rashes, anxiety attacks, muscle and joint pain, numbness, mood changes, menstrual cramps out of cycle, hearing loss or ringing in the ears, and heart palpitations.

Aspartame has three components: phenylalanine (50%), aspartic acid (40%), and methanol, aka wood alcohol (10%). But, their breakdowns present an even greater cause for concern. Phenylalanine decomposes into diketopiperazine (DKP), a known carcinogen when exposed to warm temperatures or prolonged storage. At 84 degrees F, the wood alcohol converts to formaldehyde. The body's temperature is 98.6 degrees F. Talk about "Night of the Living Dead"!

Infants are four more times sensitive to excitotoxins, which is what Aspartame is classified as, than adults.

The FDA refused to approve Asparatme 16 straight times. It was specifically rejected in 1974 because it was shown to cause brain tumors in rats.

Pages S5507 – S5511 of the Congressional Record dated May 7, 1985 showed convincing evidence that G.D. Searle and Company, the manufacturer of Aspartame which is now owned by Monsanto, manipulated its tests to get approval.

If you follow the money trail you will find that Monsanto has a billion dollars in sales annually from the sale of aspartame, the media has tens of billions of dollars invested in advertisements for over 5,000 products, the medical system makes hundreds of billions in expensive but useless tests that cannot pinpoint patients' problems with certainty, and then there's the pharmaceutical industry pushing expensive drugs that don't work

What's interesting is that the herb **stevia**, which is completely safe, is a natural sweetener that does not contribute to weight gain, yet the FDA has made it **illegal** for stevia's manufacturers to state that it is a sugar subsitute.

Please, please put health first and not corporate profits.

Aloha!

Hesh Goldstein, MSNutri

Part I of III

TESTIMONY FOR HB2680 & SB2506 – BAN ASPARTAME IN HAWAII
SENATE & HOUSE HEALTH COMMITTEES

Dear Honorable Chairs of the Senate and House Health Committees,

I am testifying in support of these bills to ban aspartame in food and beverage products in Hawaii. I have been a consumer of diet beverages since 1988. I suffered from high blood pressure that could not be controlled by medication, uncontrollable diabetes requiring pills. insulin shots since Feb 2007, tachycardia (rapid heart beat), continuous heart muscle spasms since early 2000, and several anxiety attacks. I even had to be hospitalized twice, in 2002 and 2006, due to my heart spasms.

Fortunately I have overly concerned children, who forced me to go on the Jenny Craig diet on Aug 26, 2007, and even paid for it. Being required to log everything I ate and drank, I was surprised that my blood sugar and blood pressure went down slightly during the first two weeks after a loss of only 4 lbs. I was still consuming about 2 to 3 diet sodas per week and drinking only 2 to 3 cups of water/day.

The diet counselor then stressed that I must drink at least 8 cups water/day as required by the diet plan. The financial guilt of my children paying, motivated me to be more disciplined and so I started logging down each cup of water consumed. To achieve the goal of 8 cups, while tolerating the inconvenience of going to the bathroom often, I was so well hydrated that I stopped consuming all other beverages (diet sodas, coffee, fruit juices). To my surprise and my RN diabetic nurse's amazement blood sugar dropped so low that there was concern about going into a diabetic coma while sleeping. On Sept 9, 2007, I was advised it was OK to stop the insulin shots.

About 10 lbs lighter in Dec 2007, I was asked by a friend in Molokai to support this bill to ban aspartame in Hawaii. Having conducted research since 1997 on electro-toxins, I was well aware of the excito-toxic effects of MSG and aspartame, but being naïve like most people, I thought that "just a little bit," in moderation, is OK. I was so, so wrong. I then realized that since I stopped consuming aspartame products in Sept 2007, I have never had a heart muscle spasm in addition to stopping insulin shots. I also realized that prior to being hospitalized in 2006 with heart muscle spasms occurring as frequent as every ½ hour, I was visiting grandchildren in Los Angeles at the time and consuming 2 to 3 cans of diet soda/day. Although anecdotal, making this connection was so important to improvement in my health. By process of elimination, detailed record keeping, and strict regimented diet, there is little doubt in my engineering mind that aspartame beverages were making me sick.

I then did additional research to look into adverse health effects. As you know, aspartame products contain the labeling: **PHENYLKETONURIC: PHENYLALANINE**, although most people do not know what it means. Phenylketonuria (aka PKU) is a bad condition in which excess phenylalanine could create phenylketone in the urine (mousey smell), cause absence or deficiency in hydroxylase, and affect tyrosine levels. Tyrosine is an amino acid which helps insulin receptor cells get glucose into cells. Phenylalanine is an amino acid which occurs naturally in some foods while chemically bound with other things compared to concentrated phenylalanine from aspartame which enters the blood more readily. According to Mosby's Medical Dictionary (2006 Edition), "accumulation of phenylalanine is toxic to brain tissue." One study using people actually showed phenylalanine blood levels increased 23-39%.

Although there are many published studies for or against aspartame, using it as an artificial sweetener just does not pass the common sense test. Since it is known that aspartame breaks down to aspartate (40%), phenylalanine (50%), and methyl ester (10%), which further breaks down into methyl alcohol and formaldehyde, why do we want it in our food chain? How can we rationalize to say that it will help diabetics and obese people when we have other natural alternatives that are a lot safer such as stevia, xylitol or Just Like Sugar. It may take decades before good unbiased research comes out to demonstrate how unsafe it really is. Furthermore, just like smoking and asbestos, I suspect that the majority of harm will become evident after a few years of ingestion depending on the rate of consumption and individual chemical sensitivity.

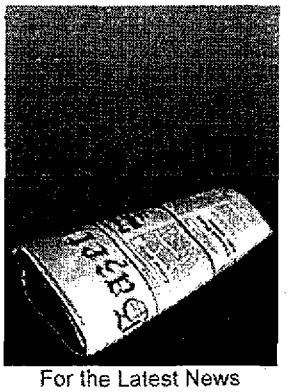
In conclusion, there are two distinct detrimental attitudes in our society that I consider significantly contribute to our escalating health problems. The first is "MORE IS BETTER." This is evidenced by the increased exposure to many different sources of fluorides, xrays as well as the wide use of aspartame in food and beverage products. The second harmful attitude is "IT'S JUST A LITTLE BIT" even though it is toxic. Unfortunately, no one is keeping track of all these "little bits" or test for safety at cumulative worse case conditions to see if there is an additive or synergistic effect on the unborn or our young children. Yes, it may be FDA approved, but the FDA is broken.

We need to once again return to THE PRECAUTIONARY PRINCIPLE which is the strongest basic foundation of common sense and good medicine. For the sake of our children and the unborn, lets unite to get rid of all these bad "little bits" one at a time starting with the passing of these bills.

Respectfully,
Adrian Chang
Retired PHNS Nuclear Engineer, Ph 227-9763

Suggested Amendment: Section 1 first sentence: Change to read (changes underlined): The legislature finds it is imperative for the public health, safety and welfare to declare that aspartame, as commercially added in food and beverage products and in all their trade names, are poisonous and deleterious food additives due to their neuro-toxic and carcinogenic metabolites.

Reason for Change: Use of the term "derivative compounds" is too vague and could be construed to include natural phenylalanine found in some food products.



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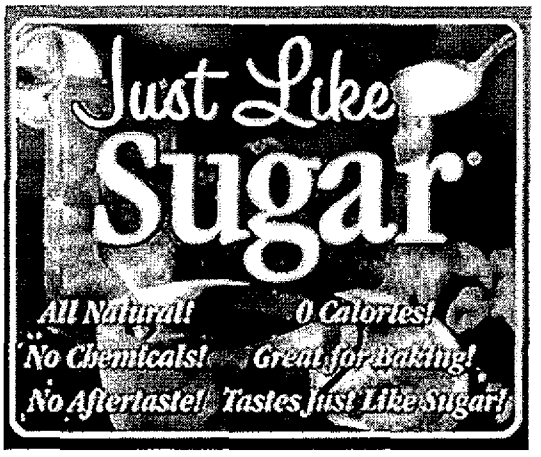
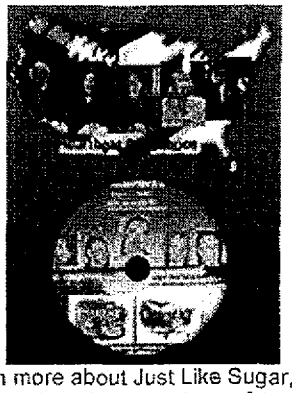


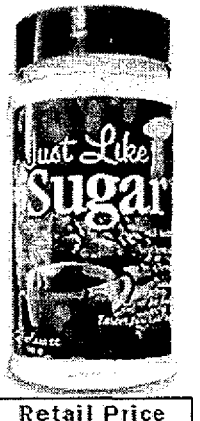


Learn more about Just Like Sugar, Inc.
As featured on the "Heartbeat of America."
Click Here or the image above to watch the video.

February 22, 2008

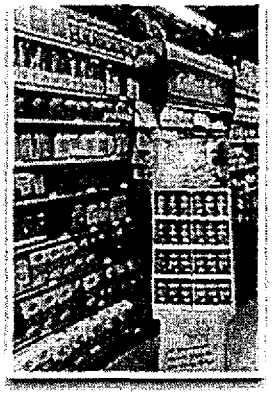
Note: Example of a safer, all natural sweetener. Go to www.justlikesugarinc.com. Cost is comparable to aspartame. C. Chang

Product Information



Retail Price
$6.99

Just Like Sugar® is a 100% natural FDA GRAS approved sweetener made from only the purest of ingredients.



Just Like Sugar® mimics the attributes of regular cane or beet sugar in every way without any of the negatives from sugars on the market today.

Just Like Sugar® contains no sugar alcohols and does not case the laxative effect of some of the other sweeteners.

Just Like Sugar, Inc. is proud to introduce our newest FDA GRAS taste sensation **Just like Sugar®**, a totally unique Natural Sweetener that is available for sale, through our Web site, and is now found in many manufactured food products, retail stores such as Whole Foods Markets®, Wild Oats Markets®, Sun Harvest, Henry's Farmers Market, and many other fine retailers in Canada and worldwide.

Just Like Sugar® is a wonderful natural alternative for those health conscious people, who choose a

TESTIMONY FOR HB2680 & SB2506 – BAN ASPARTAME IN HAWAII
HOUSE & SENATE HEALTH COMMITTEES

Dear Honorable Chairs & Committee Members of the Health Committees,

For my testimony in support of these bills, I am submitting extracts from the most recent published journal studies, with my comments. Because of the medical and technical information contained, the average individual would find it difficult to comprehend. However, since these studies were independently funded and not corporate funded, the integrity of the results are very credible.

1. M Soffritti, F Belpoggi, E Tibaldi, DD Esposti, M Lauriola. First Experimental Demonstration of the Multipotential Carcinogenic Effects of Aspartame Administered in the Feed to Sprague-Dawley Rats. Environmental Health Perspectives. 2006 Mar;114(3):379-385.

Abstract: The results of the study show for the first time that APM (aspartame), in our experimental conditions, causes a) an increased incidence of malignant-tumor-bearing animals with a positive significant trend in males and in females, in particular those females treated at 50,000 ppm; b) an increase in lymphomas and leukemias with a positive significant trend in both males and females, in particular in females treated at dose of 100,000, 10,000, 2,000 or 400 ppm; c) a statistically significant increased incidence, with a positive significant trend, of transitional cell carcinomas of the renal pelvis and ureter and their precursors (dysplasias) in females treated at 100,000, 50,000, 10,000, 2,000 or 400 ppm; and d)an increased incidence of malignant schwannomas of peripheral nerves with a positive trend in males. The results of this mega-experiment indicate that APM is a multipotential carcinogenic agent, even at a daily dose of 20 mg/kg body weight, much less than the current acceptable daily intake. On the basis of these results, a reevaluation of the present guidelines on the use and consumption of APM is urgent and cannot be delayed.

My Comment: This study involved over 25,000 rodents in which APM was administered for the entire life span. This is much more realistic than studies which found no evidence of harm that lasted for very short periods of time (e.g. 20 days). This study, and the one below, was performed by the Cesare Maltoni Cancer Research Center, European Ramazzini Foundation of Oncology and Environmental Sciences, Bologna, Italy.

2. M Soffritti, F Belpoggi, E Tibaldi, DD Esposti, MLauriola. Life-Span Exposure to Low Doses of Aspartame Beginning During Prenatal Life Increases Cancer Effects In Rats. Environmental Health Perspectives. 2007 Sep;115(9):1293-1297.

Abstract: Our results show a) a significant dose-related increase of malignant tumor-bearing animals in males, particularly in the group treated with 2,000 ppm APM; b) a

significant increase in incidence of lymphomas/leukemias in males treated with 2,000 ppm and a significant a significant dose-related increase in incidence of lymphomas/leukemias in females, particularly in the 2,000-ppm group; and c) a significant dose-related increase in incidence of mammary cancer in females, particularly in the 2,000-ppm group. The results of this carcinogenicity bioassay confirm and reinforce the first experimental demonstration of APM's multipotential carcinogenicity at a dose level close to the acceptable daily intake for humans. Furthermore, the study demonstrates that when life-span exposure to APM begins during fetal life, its carcinogenic effects are increased.

My Comment: This study should be a strong caution to women who are pregnant since APM could have harmful effects to the fetus. Even in alcohol beverages, which is not as toxic to the fetus as APM, warnings are placed on labels that it consuming alcohol while pregnant could cause harm to the fetus. Why not also for aspartame beverages?

3. CH Park, SH Choi, Y Piao, SH Kim, YJ Lee, HS Kim, SJ Jeong, JC Rah, JH Seo, JH Lee, KA Chang, YJ Jung, YH Suh. Glutamate and Aspartate Impair Memory Retention and Damage Hypothalamic Neurons in Adult Mice. Toxicology Letters. 2000;115:117-125.

Abstract: We examined the effects of systemic administration of monosodium glutamate (MSG) or aspartate (ASP) on the memory retention and neuronal damage in the brains of adult mice. Compared with the control mice, a single intraperitoneal injection of either 4.0 mg/g MSG or 0.5 mg/g ASP after acquisition trial significantly shortened the response latency in the passive avoidance test, accompanying by the transient weight loss. Histopathological analysis of the brains of these mice revealed that neurons in the arcuate nucleus of hypothalamus were damaged markedly by MSG or ASP. Other brain areas including including cerebral cortex and hippocampus did not show any pathological changes. These findings suggest that systemic administration of MSG or ASP could impair memory retention and damage hypothalamic neurons in adult mice.

My Comment: Damaged neurons have a major role in many neurological disorders such as autism. Although the study did not cover administering both MSG and ASP simultaneously, logic follows that harm from both will be additive or synergistic. This study was conducted in Seoul, South Korea, which has very high standards of integrity. A few years ago, a researcher who published fraudulent results was strongly ostracized in public.

4. PL Lutsey, LM Steffen, J Stevens. Dietary Intake and the Development of the Metabolic Syndrome. The Atherosclerosis Risk in Communities Study. Circulation. 2008 Jan;117:754-761.

Pg 757: Diet soda intake was strongly associated with increased risk (metabolic syndrome) across all models.

Pg 759, Discussion: Diet soda also was positively associated with incident MetSyn, with those in the highest tertile of intake at 34% greater risk than those in the lowest tertile. The strength of association was surprising. However, it is consistent with recent data from the Framingham Heart Study, which found a 56% increased risk of MetSyn among those consuming ≥1 serving of diet soda per day. (26) Furthermore, in a recent cross-sectional study, diabetics who consumed diet soda had poorer glucose control than those who consumed none. (44) A study in rats suggested that consumption of artificial sweeteners impairs the ability of the body to predict the caloric content of foods and may liead to increased intake and body weight. (45) Although prospective study designs establish temporal sequence, it is possible that reverse causality or residual confounding may explain this finding, especially because consumption of diet soda is higher among diabetics than among nondiabetics. (44). Additional research on the relation between diet sodan and incident MetSyn is clearly warranted.

(26) Dhingra R, et al. Soft Drink Consumption and Risk of Developing Cardiometabolic Risk Factors and the Metabolic Syndrom in Middle-Aged Adults in the Community. Circulation. 2007:116:480-488.
(44) Mackenzie T, et al. Beverage Intake, Diabetes, and Glucose Control of Adults in America. Ann Epidemiol. 2006;16:688-691.
(45) Davidson TL et al. A Pavlovian Approach to the Problem of Obesity. Int J Obes Relat Metab Disord. 2004;28:933-935.

My Comment: Circulation is the official journal of the American Heart Association. Since heart disease is the number one killer of people and knowing that aspartame breaks down into excessive phenylalanine and methanol/formaldehyde, the connection is obvious. The Precautionary Principle must be exercised. This study was also referenced in the Feb 6, 2008 Honolulu Star Bulletin article "Drinking Diet Soda Raises Health Risk."

My Conclusion: Any group of so called "experts" can review a published study and pick out weaknesses and/or flaws to discredit the study. Since double-blind studies are the "gold standard" of research, unfortunately, the funding source is not double-blinded. The above studies are the most recently published. I assure you that many opposers of the bill have not even read them and are just parroting off the poor logic that "it is safe because the FDA has approved it." If they did read these studies and the many others that show adverse effects, and apply their high school chemistry of the hazards of a chemical that breaks down to methanol/formaldehyde in the body, they would not speak out so loudly in support. Complete copies of the above studies are available on request.

Adrian Chang, Retired USN PHNS Nuclear Engineer, Cell 227-9763.

Part III

SUPPLEMENT TO TESTIMONY ON SB2506 TO BAN ASPARTAME: Sweet Misery – A Poisoned World was produced by Cori Brackett, who was diagnosed with advanced multiple sclerosis and confirmed by four physicians. Upon discontinuing consumption of aspartame products, she was able to finally be free of a wheel chair and was strongly motivated to produce this documentary. Since it is professionally difficult for the MDs shown to come in to testify for just a few minutes, their views are well explained. To expedite viewing, it is suggested that you fast forward through the anecdotal testimonies of the victims, in order to focus on the facts and background as to how aspartame finally got FDA approval after being denied for about 16 years. I will also make available, upon request, latest studies from the journal Circulation (American Heart Association) and the European Ramazzini Foundation of Oncology and Environmental Sciences, both independent, non-corporate, funded studies. If any questions, please contact me. Mahalo! Adrian Chang, 227-9763

R. C. Botti

P.O. Box 385757
Waikoloa, HI 96837

February 25, 2008

To: Senate Committee on Health
Senator David Ige, Chair
Senator Carol Fukunaga, Vice Chair

By: Richard C. Botti
P.O. Box 385757
Waikoloa, HI 96738

Re: SB 2506 Relating to Food

Chairs & Committee Members:

I oppose the passage of SB 2506 which would ban any food product containing aspartame. I am speaking as an individual because I want to let you know from an individual's standpoint what it is like to live with diabetes type II, and the challenges that it provides.

I have the choice of using sugar or an artificial sweetener. My doctor has advised me that uncontrolled sugar intake and carbohydrates that turn to sugar in my system will make me blind, lead to poor blood circulation in my feet, or will kill me. My Mother died from diabetes.

FDA has both sugar and asparatame on the list of GRAS (Generally Regarded As Safe) ingredients for foods. While the Legislature is considering banning asparatame, you would never even hear a bill that would ban sugar. To make it more specific, my doctor has specifically advised me to closely maintain my blood sugar level. My doctor has never told me to avoid asparatime, even though I watch my total consumption of sugar substitutes.

The issue is choices. We all want the best choice for ourselves, and until other choices are available, I need the choice of products that do not contain sugar or milled carbohydrates. Banning aspartame would be more dangerous to my health than any perceived threat from foods containing aspartame. For those that claim it is bad, they can do the reverse of what I do.

testimony

From: stoked.nihilist@gmail.com on behalf of Kim Kido [kidokimb@hawaii.edu]
Sent: Thursday, February 21, 2008 11:37 AM
To: testimony
Subject: Re: Testimony for SB2506, Aspartame Ban

Date of Hearing: Monday, February 25, 2008
Time of Hearing: 1:15 PM
Place of Hearing: Conference Room 016
Committee: COMMITTEE ON HEALTH

Testimony:

I strongly support SB 2506, and hope that it passes. The only thing I can see that would improve this measure is to make the date of enactment sooner! Thank you, whoever introduced this one.

Kim Kido
Alewa Heights

SB2506

Measure Title:
RELATING TO FOOD.

Report Title:
Artificial Sweetener; Aspartame; Ban; Food

Description:
Bans the use of the artificial sweetener aspartame in food products.

Introducer(s):
ENGLISH (BR)

Current Referral:
HTH

WRITTEN

Hawaii Dietetic Association
Comments on Aspartame
Hearing on SB2506
Senate Committee on Health
February 25, 2008

Deleted: H

Submitted by Kristine Wallerius Cuthrell, MPH, RD
President-Elect, Hawaii Dietetic Association
Written Comments Only

The Hawaii Dietetic Association is made up of more than 300 members, the majority of whom are Registered Dietitians practicing in our Community in hospitals, public health programs, private practice, academic research facilities, and other settings.

Our comments today relate to SB2506. The Hawaii Dietetic Association believes that it is the role of credentialed dietetics professionals to advocate for and promote sound, science-based nutrition information to the public, to function as primary nutrition educators to health professionals, and to actively counter and correct food and nutrition misinformation. SB2506 does not accurately reflect the totality of the science and could have negative ramifications on those people in our state who rely upon low-calorie sweeteners to aid in managing their weight or health conditions.

Aspartame is a calorie-free alternative to sugar and other caloric sweeteners. Its safety has been confirmed repeatedly in peer-reviewed research, not only by health experts, scientists and government agencies in our country, but around the world. It is a simple ingredient that is made of the same components as in the foods we eat and drink each day. For diabetics and for any individual limiting their calorie intake for health reasons, taking away a tool that aids in this effort is not justified by scientific evidence. Individuals who feel that aspartame is not a healthy choice for them are free to make the choice not to consume aspartame or foods containing aspartame, which are clearly labeled as containing this ingredient.

The HDA believes that consumers can safely enjoy a range of nutritive and nonnutritive sweeteners when consumed in a diet that is guided by current federal nutrition recommendations, such as the Dietary Guidelines for Americans and the Dietary References Intakes, as well as individual health goals. As dietetics professionals, we seek to provide consumers with science-based information about sweeteners and support research on the use of sweeteners to promote eating enjoyment, optimal nutrition and health. At present, we are facing an obesity epidemic, and it is critical that we not take away this simple tool that can help individuals manage their calorie intake.

We commend the Senate Committee on Health for your interest in improving the health of Hawaii's citizens. The Hawaii Dietetic Association and our members look forward to working with you to provide consumers with science-based information about the role nutritive and nonnutritive sweeteners can play in a healthy diet.

Kanoe Kamanao

From: Allan Wang [awang@hawaii.rr.com]
Sent: Friday, February 22, 2008 12:18 AM
To: Sen. David Ige
Subject: Senate Bill 2506 is inaccurate, misleading, and unnecessary

Dear Senator Ige,

As a healthcare professional and trained scientist, I would like to comment that the basis of Senate Bill 2506 is false and unnecessary.

I would first like to state that I have no financial or vested interest whether aspartame is on the market or not, but am very interested in adherence to standards of good science and gleaning the chaff from the wheat in this era of alarmist and self-seeking pseudoscience.

Innumerable studies over decades, including a staggeringly comprehensive review last fall, have shown aspartame to be safe. Aspartame clearly does not cause cancer, lead to obesity, or cause any type of diabetes. In fact it can clearly be salutary in people who have weight problems or diabetes.

Please note the comprehensive review at the link below, and a University of Maryland press release covering the same study. This study was published by a rigorously peer reviewed journal. Unlike many aspartame detractors, the study authors have no vested interest in the outcome of their analysis, and their research effort was not conditioned on any particular outcome of their review.

http://www.aspartame.net/onpagepdf/Critical_Reviews_evaluation_summary.pdf

http://www.aspartame.net/onpagepdf/Press_Release_Univ_of_MD.pdf

I was shocked and dismayed to just find out today that there are two bills before the Hawaii State Legislature that inaccurately and falsely target this safe and useful non-nutritive sweetener as a danger to public health. As an educated, impartial, and evidence-based practitioner of state of the art medical care in Hawaii, I know it is important to stand up and speak against false and inflammatory pseudoscience when it rears its often self-serving head.

Although I am very busy teaching, taking care of patients across the Big Island and in Honolulu, volunteering in community children's asthma education, and coffee farming, I had to pause to send this heartfelt (and "brain-felt") note against quackery rearing another of its hydra heads.

Please do not allow Senate Bill 2506 to move forward in the legislative process. It is a shocking example of fear mongering attempting to be respectable through a cloak of bad science.

Sincerely,

Allan Wang

Allan Wang, MD, PhD, ABAAI, FAAAAI
President, Hawaii Society of Allergy / Asthma / Immunology
Assistant Clinical Professor, UH School of Medicine
Medical Director, Hamakua Asthma Camp
Specialist consultant, HMSA Pharmacy and Therapeutics Committee
75-166 Kalani Street, Suite 204, Kailua-Kona HI 96740
868 Ululani Street, Suite 109, Hilo HI 96720
The Queen's POB I, 1380 Lusitana Street, Suite 904, Honolulu HI 96813
Voice: (808) 329-9264 Facsimile: (808) 329-9260 Toll-free (866) 290-5569

CHPA

founded 1881

February 25, 2008
To: Senate Committee on Health

CHPA Comments on S.B. 2506

Members of the Committee on Health:

Thank you for this opportunity to comment on S.B. 2506 on behalf of the Consumer Healthcare Products Association (CHPA). CHPA is the 126 year old trade association representing the major manufacturers of over-the-counter medicines. S.B. 2506 would prohibit the manufacture and sale of any food containing aspartame after Dec. 31, 2008. We oppose this legislation.

Many OTC products that help people achieve and maintain their health would be impacted by this legislation. Some popular dietary supplements contain aspartame. Because dietary supplements are regulated as food, they would be included in this prohibition. Aspartame is approved by the U.S. Food and Drug Administration (FDA) as a safe and effective food additive. It is one of the most highly regulated food products. When metabolized by the body, aspartame is broken down into three substances which are available in similar or greater amounts from eating common foods.

Under the Food Additives Amendment of 1958, Congress vested FDA with the authority to regulate the safety of food additives, such as aspartame. The FDA has examined aspartame extensively since it was first submitted to the FDA for approval in 1973. It was first approved in the United States in 1981 as a tabletop sweetener, and for use in gum, breakfast cereal, and other dry products. In 1987, the General Accounting Office investigated the process surrounding FDA's approval of aspartame and confirmed the agency had acted properly. The FDA granted final approval to its use as a general-purpose sweetener in all foods and drinks in 1996 in accordance with good manufacturing practices. It is one of the most widely used artificial sweeteners.

FDA has continued to review complaints alleging adverse reactions to products containing aspartame. To date, FDA has not determined any consistent pattern of symptoms that can be attributed to the use of aspartame. Because the FDA is the final arbiter of food additives and because the FDA has declared aspartame to be safe and effective, CHPA believes that S.B. 2506 would be in direct conflict with federal law. We respectfully request that you keep this safe, highly regulated product available for consumers.

Respectfully submitted by Mandy Hagan, Director, State Government Relations

Consumer Healthcare Products Association
900 19th Street, NW, Suite 700
Washington, DC 20006
T 202.429.9260 F 202.223.6835
www.chpa-info.org

February 21, 2008

The Honorable David Y. Ige
Chair, Committee on Health
Hawaii State Senate
415 South Beretania Street
Honolulu, HI 96813

RE: SB 2506 (English)

Dear Senator Ige:

On behalf of the Grocery Manufacturers Association, I am writing to express our opposition to Senate Bill 2506 (English), which would prohibit foods containing aspartame. The measure is scheduled for hearing in the Committee on Health on February 25.

The Grocery Manufacturers Association (GMA) represents the world's leading food, beverage and consumer products companies. The Association promotes sound public policy, champions initiatives that increase productivity and growth and helps to protect the safety and security of the food supply through scientific excellence. The GMA board of directors is comprised of fifty-two chief executive officers from the Association's member companies. The $2.1 trillion food, beverage and consumer packaged goods industry employs 14 million workers, and contributes over $1 trillion in added value to the nation's economy.

Aspartame is a safe low calorie sweetener approved for use in foods as proven in recent peer-reviewed, scientific studies, and as determined by the United States Food and Drug Administration (FDA). Aspartame has been reviewed and determined safe 23 times over the past 26 years by the FDA. Aspartame was first approved in 1981 during the Reagan administration and received a general use approval in 1996 during the Clinton administration. The FDA continues to review the use of aspartame and stated as recently as 2006 that there is no need for dietary change in regard to the use of aspartame.

A 2007 comprehensive review of more than 500 studies by a panel of eight leading experts in the areas of toxicology, epidemiology, metabolism, pathology, biostatistics

GROCERY MANUFACTURERS ASSOCIATION
1350 I Street, NW :: Suite 300 :: Washington, DC 20005 :: ph 202-639-5900 :: fx 202-639-5932 ::
www.gmaonline.org

etc., conclusively determined that aspartame is safe. The review, "Aspartame: A Safety Evaluation Based on Current Use Levels, Regulations, and Toxicological and Epidemiological Studies," was published in the September 2007 issue of *Critical Reviews in Toxicology,* the premier journal in its field. Furthermore, leading health organizations such as the American Dietetic Association, the American Diabetes Association and the American Medical Association's Council on Scientific Affairs support the safety of aspartame.

Additionally, aspartame provides those individuals who must control sugar intake for health reasons, such as the control of diabetes and excessive weight. With more than 65 percent of the population overweight, aspartame and products sweetened with aspartame can help people reduce and control calories. Foods and beverages sweetened with aspartame offer people with diabetes a much wider variety of products from which to choose and greater flexibility in budgeting their carbohydrate intake. Thus, it can help them follow nutrition recommendations while enjoying good-tasting foods.

For these reasons, we respectfully request that this committee oppose this legislation.

Sincerely,

Caroline Silveira
Director, State Affairs
Grocery Manufacturers Association

Senator David Ige, Chair
Senator Carol Fukunaga, Vice Chair
Committee on Health
State Capitol, Honolulu, Hawaii 96813

HEARING Monday, February 25, 2008
1:15 pm
Conference Room 016

RE: SB2506, Relating to Food

Chair Ige, Vice Chair Fukunaga, and Members of the Committee:

Retail Merchants of Hawaii (RMH) is a not-for-profit trade organization representing about 200 members and over 2,000 storefronts, and is committed to support the retail industry and business in general in Hawaii.

RMH opposes SB2506, which bans the use of the artificial sweetener aspartame in food products.

The FDA, the governmental agency charged with safeguarding the American food supply, has concluded that aspartame is safe for the general public, including diabetics, pregnant and nursing women, and children.

Aspartame is one of the most thoroughly studied ingredients in the food supply. Prior to its approval by the FDA in 1981, aspartame's safety was documented in more than 100 scientific studies. These tests were conducted in laboratory animals and several human subpopulations, including healthy infants, children, and adults, lactating women, persons with diabetes, and obese individuals. Aspartame was tested in amounts many times higher than individuals could possibly consume in the diet. The results of these studies demonstrated that aspartame is safe and not associated with adverse health effects.

Aspartame has been approved for use by more than 100 nations worldwide. It is used widely in major industrialized countries such as the U.S., Canada, the United Kingdom, Germany and Japan. Aspartame has also been reviewed and found safe by expert scientific committees, including the Joint Expert Committee on Food Additives (JECFA) of the United Nations Food and Agricultural Organization and World Health Organization as well as the Scientific Committee on Food of the European Union. In detailed re-reviews of aspartame's safety in 2002 and 2003, health authorities in the European Union, United Kingdom, France, and Canada reaffirmed aspartame's safety.

Considering that about two-thirds of Americans are overweight or obese, and obesity is an acknowledged problem in Hawaii, regulating appropriate caloric intake is important. Since aspartame-sweetened foods and beverages are lower in calories than their sugar-sweetened counterparts, such low- or reduced-calorie products, together with regular physical activity, can help with weight control. The results from a 3-year study at Harvard Medical School showed that aspartame is a valuable aid to a long-term weight management program that included diet and physical activity.

Given the data provided, we respectfully request that you hold SB2506. I have attached a list of pertinent and enlightening web sites that RMH members provided, should you want additional information. Thank you for your consideration and for the opportunity to comment on this measure.

Carol Pregill
President

RETAIL MERCHANTS OF HAWAII
1240 Ala Moana Boulevard, Suite 215
Honolulu, HI 96814
ph: 808-592-4200 / fax: 808-592-4202

http://www.time.com/time/magazine/article/0,9171,990167,00.html a great article in Time magazine exposing the aspartame hoax for what it is.

http://www.joslin.org/managing_your_diabetes_696.asp great article from the Joslin Diabetes Medical Center on "Correcting Internet Myths About Aspartame". Joslin is an affilliate of Harvard Medical School.

http://www.caloriecontrol.org/aspartame.html the Calorie Control Council site

http://www.aspartameorg/aspartame_vpk.html industry website that has tones of studies, reports, links on aspartame.

http://www.uklupus.co.uk/aspart.html Lupus Foundation site, correcting the falsehood tha aspartame causes lupus.

http://tafkac.org/ulz/nutrasweet.html article exposing aspartame wackiness as an Urban Myth.

http://www.ific.org/publications/brochures/aspartamebroch.cfm the International Food Information Council information on aspartame.

http://www.snopes.com/medical/toxins/aspartame.asp internet magazine that tackles the aspartame myth.

http://web.mit.edu/newsoffice/1998/aspartame-0916.html Link to MIT study on aspartame, but as a disclaimer they did get industry money so we do not push this one too much.

http://www.quackwatch.org/search/webglimpsecgi?othersite=&ID=2&query=aspartame a site that is very famous where medical doctors expose quack stories, includes aspartame story/

http://www.junkscience.com/news/nutrasweet.html a site that exposes scientific hoaxes.

http://www.equal.com/downloads/Aspartame_Fact_Sheet.pdf this page has printable brochures from one of the manufacturers, "Equal". Honestly we were more successful staying away from anything the industry printed, and going for third party articles and studies.

http://web.archive.org/web/20040205093914/http://www.healthcentral.com/DrDean/DeanFullTextTopics.cfm?ID=8134 this one is from HealthCentral, where real doctors write articles on health questions.

http://www.aspartame.net/FAQ_menu.asp this is an industry sponsored site with articles, links, studies

http://www.fda.gov/bbs/topics/ANSWERS/ANS00772.html article from the Food and Drug Administration

http://www.cfsan.fda.gov/~dms/fdsugar.html FDA consumer page on aspartame

http://www.cancer.gov/cancertopics/factsheet/Risk/artificial-sweeteners National Cancer Institute clears up the aspartame myth with a huge study

http://www.alz.org/alzheimers_disease_myths_about_alzheimers.asp National Alzheimers Institute tackles the subject, scroll down to Myth Number 4. What is great about these groups is that most legislators will know someone from one of these credible health groups that can sort out the crazy stuff.

http://www.digestivefacts.com/ms/news/532606/main.html a story about the European FDA debunking the Ramazzini rat study.

http://www.media-awareness.ca/english/resources/special_initiatives/wa_resources/wa_shared/tipsheets/deconstructing_webpages.cfm the Media Awareness network did a watchdog report on the aspartame hoax and how the internet was used effecteively to spread it.

http://www.hc-sc.gc.ca/fn-an/nutrition/prenatal/national_guidelines-lignes_directrices_nationales-06g_e.html the Health Canada website clears up the myth that aspartame should not be consumed by pregnant women.

http://www.aafa.org/display.cfm?id=9&sub=20&cont=285 the Allergy and Asthma Foundation site tackles aspartame

http://urbanlegends.about.com/library/blasp.htm about.com did a 3 page well researched story exposing the woman that started the aspartame hoax.

http://www.doctorslounge.com/rheumatology/forums/backup/topic-1156.html an advice column for people asking doctors questions.

http://www.nationalmssociety.org/site/PageServer?pagename=HOM_ABOUT_headlines_aspartame story from Multiple Sclerosis society explaining aspartame scare is a hoax.

http://www.encolombia.com/aspartamo6.htm statement by various groups denouncing aspartame myth.

http://www.mult-sclerosis.org/news/Jan1999/DebunkingInternetHealthAlarms.html debunking article from MS Foundation, calling the aspartame myth the "scare du jour".

http://www.aspartame.info/opinion/op_ama.html the American Medical Association statement

http://www.cancer.org/docroot/ped/content/ped_1_3x_aspartame.asp American Cancer Society

http://www.americanheart.org/presenter.jhtml?identifier=4447 American Heart Association

http://www.mayoclinic.com/health/diabetes-diet/NU00592/UPDATEAPP=0 none other than the Mayo Clinic

http://www.kidshealth.org/parent/food/question/aspartame.html the Neours Foundation

http://www.diabetes.org/nutrition-and-recipes/nutrition/sweetenersjsp The American Diabetes Association

http://ec.europa.eu/food/fs/sc/scf/out155_en.pdf Scientific Committee of the European Food Safety Commission

http://www.nzfsa.govt.nz/publications/media-releases/2007/aspartame-press-release.htm New Zealnad Food Safety Authority

http://wwwcdc.gov/mmwr/preview/mmwrhtml/00000426.htm the Center For Disease Control (CDC)

http://www.foodstandards.gov.uk/news/newsarchive/2002/dec/aspartamereview United Kingdom Food Standards Agency

http://www.eatright.org/cps/rde/xchg/ada/hs.xsl/nutrition_1030_ENU_HTML.htm American Dietetic Association

http://www.msnbc.msn.com/id/12155793/from/ET/ MSNBC story

http://wwwpregnancytoday.com/experts/n-dietsodas.htm Pregnancy Today magazine

testimony

From: Victor Brandt [victor@brandts.com]
Sent: Thursday, February 21, 2008 6:15 PM
To: testimony
Subject: SB2506 Ban Aspartame, hearing in Senate Health, Room 16; 1:15 PM, 2/25

Please copy as a committee handout for this hearing

Dear Honorable Senators: David Y. Ige, Carol Fukunaga, Ron Menor & Paul Whalen

My name is Victor Brandt. I am 49 years old and have lived and worked in Honolulu most of my life. First of all I applaud you for creating this bill and trust and hope that "good" will prevail. I believe you are about to create history in taking aspartame out of our foods. It will not only enhance the lives of those living on our islands but a statement like this will most definitely reverberate around the world in such a positive way that it will awaken the unassuming general public to understand that maybe it's aspartame in their diet that's making them sick. It will surely be significant. So please, stand strong in the face of the many lobbyist who will definitely be in your face to tell you there's no conclusive evidence. And remember, they're paid to say that!!

As for my story. It is quite simple and I feel lucky compared to many that I have met over the years, that like me, were mixed up with aspartame and experienced many of it 92 possible symptoms, a list, by the way, that the FDA actually created prior to it's 'underhanded" approval in the early 80's by a quick moving Donald Rumsfeld. (At the bottom of my testimonial is a Letter from Dr. Betty Martini addressed to one of the Editors in Honolulu several weeks ago...she eloquently tells the story of how this addictive excitoneurotoxic carcinogenic drug got approved...a very worthwhile read!)

My problems started in the early 90's. I was addicted to sugar, probably had been since I was born, but I was consuming way too much sugar in the form of chocolates, ice cream, cookies and soda. I didn't feel all that bad, but wanted to get off the up and down mood swings that I was experiencing, so on a New Year's resolution I drop sugar from my diet. Naturally I still had a sweet tooth and became attracted to everything "Sugar Free". I switched my diet and started consuming sugar free cookies, candies and chewed several packs of sugar free gum per day. Unsuspectingly I was consuming a lot of Aspartame. My health started going into a tail-spin and I had no idea why nor knew anything about aspartame at the time.

I made it through all of the 90's, but at times I would have preferred to die. I had developed very challenging health issues along the way including severe headaches, joint pain, fatigue, insomnia, heart palpitations, rashes, asthma, blurred vision and I even became so irritable at times with those around me that I felt like I was about to explode. All the doctors and health specialist I met said I was fine and they could find nothing wrong. I saw Western Doctors and had numerous test performs from food allergies to lost nerve sensation in my arms and legs. I then started to seek help from Naturopaths, Chiropractors, Acupuncturist, Massage Therapist, Colonic Therapist all to no avail. I also read numerous books on health and nutrition. I thought I tried just about everything and it was expensive!

However, it wasn't until I heard Dr. Betty Martini on a radio talk show that a light bulb went off. She talked for about a hour on the effects of Aspartame poisoning and I related to many of the symptoms she mentioned. She also talked about how it was wrongly approved and how the FDA actually denied approval on this product for many years before it was eventually approved.

From that day forward I stopped all the sugar free treats and became an avid reader of product labels. I read more books on the subject and found information on numerous websites. I started to shop wisely and buy only products that were made without aspartame or other artificial sweeteners or even artificial flavors. It's been well over 6 years since that light went off and I'm happy to say that my health has returned to about 90%. I continue to stay strong in my conviction and self discipline in avoiding aspartame and other

artificial sweeteners as well as MSG but it's not easy, especially if you eat out a lot. It's hard to read labels at a restaurant.

Two weeks ago I was showing a client an older home in Kaimuki. It was close to being a 'tear-down' and as the listing broker walked us through the house, I couldn't help but notice all the clear plastic bags of yet to be recycled diet soda cans. My first thought was "whew, I bet that made someone sick." Then as we walked through the debris and into the back portion of the house, there were two middle-aged men that appeared to be sleeping. It was in the middle of the day so I asked the broker who they were and if they were alright. He said that they are cousins and he didn't think anything was wrong with them physically, but maybe mentally. I thought to myself that's what happens when you get hooked on aspartame. This stuff was a science experiment gone wrong and does not belong in the human body. If you use it long enough, it will destroy you. I will forever adamantly avoid this stuff and other artificial sweeteners as much as possible...as most of my friends and co-workers will attest.

For Diabetics who are asking the question, but what will I be able to use if artificial sweeteners are banned? There is good news. First, as I experienced, you'll be healthier just staying away from anything with aspartame, aka NutraSweet/Equal/Spoonful. I've read that it will simulate and aggravate diabetic retinopathy and neuropathy as well as destroys the optic nerve from the free methyl alcohol and can cause diabetics to go into convulsions and will even interact with your insulin. Secondly, there are better alternatives already on the market such as: Pure Stevia (although it's still a little more expensive) and a product named: "Just Like Sugar" which is made from chicory and orange peel, Calcium and Vitamin C. One can find these at most health food stores and they supposed to be safe and keep ones glucose levels balanced.

Please ask your fellow Senators to stand tall against the money hunger manufacturers and their bought and paid for lobbyists.

Very sincerely,

Victor Brandt

From Dr. Betty Martini, Founder of Mission Possible International (warning the world off aspartame, operations in 38 nations.) Here is her letter to our newspaper editor:

Dear Editor:

Thank you for helping to get the news out on banning aspartame (NutraSweet/Equal/Spoonful, etc.) from the great state of Hawaii.

Yes it is linked to 92 symptoms including death from the FDA themselves. Here is that report on FDA stationery: http://www.mpwhi.com/92_aspartame_symptoms.pdf However, there are many more listed including all kinds of diseases and tumors in the 1000 page medical text by H. J. Roberts, M.D., Aspartame Disease: An Ignored Epidemic, www.sunsentpress.com

Dr. Kalani Brady, a physician at the John A. Burns School of Medicine educates on diabetes. You have to wonder what is behind his statement of it being safe when aspartame has triggered an epidemic of diabetes. It not only can precipitate diabetes but simulates and aggravates diabetic retinopathy and neuropathy, destroys the optic nerve from the free methyl alcohol, causes diabetics to go into convulsions and even interacts with insulin. It's the methanol, a severe metabolic poison that is causing so many diabetics to lose their limbs. Dr. Brady should get a copy of Dr. Roberts medical text since he is a diabetic specialist and took care of aspartame victims in the trenches of medical practice for decades. There is a large chapter on diabetes and its mechanisms. Here is an excellent letter written to Senator Ortiz y Pino in New Mexico on the subject. http://www.wnho.net/letter_to_senator_goyp_concerning_aspartame.htm Perhaps you can forward it to Dr. Brady along with this Journal of the Diabetic Association of India: http://www.dorway.com/barua.html

While the FDA today is the Aspartame Industry's Washington Branch Office, they originally fought approval to the point of asking for the indictment of the manufacturer. US Prosecutors Sam Skinner and William Conlon hired on with the defense team and the statute of limitations expired. The FDA actually revoked the petition for approval because they were so concerned about it triggering brain tumors and that it couldn't be proven safe. Here is the Board of Inquiry Report: http://www.mpwhi.com/fda_petition1.doc You will notice in the commentary above it there is a clip from Sweet Misery: A Poisoned World, an aspartame documentary, with Attorney James Turner explaining how Don Rumsfeld got this deadly chemical poison on the market when the FDA said "no".

They knew the FDA Commissioner would never over-rule the revoked petition for approval, so a call was made to him at 3:00 A.M. from the Reagan Transition Team asking him to resign. Here is a recent letter from his wife who was with him when that call came in: http://www.mpwhi.com/letter_about_jere_goyan.pdf Rumsfeld was on Reagan's transition team and said he would call in his markers and get it approved. The day after Reagan took office he appointed Dr. Arthur Hull Hayes as FDA Commissioner to do the deadly deed. Knowing it would take 30 days to get Hayes to FDA, President Reagan actually wrote an Executive Order making the FDA powerless to do anything about aspartame. Hayes over-ruled the Board of Inquiry and then went to work for the PR Agency of the manufacturer for $1000.00 a day on a ten year contract. Quite a reward.

There was so much outrage as people began being poisoned there were three congressional hearings but the bill to put a moratorium on aspartame and have the NIH do independent studies on the horrors they were seeing in the population never got out of committee. http://dorway.com/dorwblog/?page_id=65 This was due to Senator Orrin Hatch we believe who was paid by Monsanto who had now bought Searle. Today they have sold to four entities including Ajinomoto and Merisant.

We have added most of the original government documents to web, perhaps the reason Dr. Brady appears not to want people to check out the Internet. If he is really sincere about wanting to educate diabetics perhaps he should get on the Internet and also get copies of medical texts on the subject. This includes Excitotoxins: The Taste That Kills by neurosurgeon Russell Blaylock, M.D. www.sunsentpress.com If he wants scientific peer reviewed studies here's the research Dr. Ralph Walton did for 60 Minutes in l996 when Dr. John Olney made world news on the aspartame brain tumor connection. Aspartame breaks down to DKP, a brain tumor agent. http://www.dorway.com/peerrev.html Here's 13 more studies in the last 24 months showing aspartame toxicity: http://www.mpwhi.com/13_aspartame_research_studies.htm

How bad can it get? Here is the Trocho Study showing the formaldehyde converted from the free methyl alcohol embalms living tissue and damages DNA: http://www.mpwhi.com/formaldehyde_from_aspartame.pdf I spoke to the researcher when I was in Barcelona and he told me aspartame can kill 200 million. It already has, all you have to do is read the medical text and see how many neurodegenerative diseases and tumors it causes. Some women have lost as many as 8 babies on aspartame because its an abortifacient, with no warning on the label.

If you want to know how the aspartame industry fixes studies to attempt to show an addictive excitoneurotoxic carcinogenic drug shows safety, read some of these which explain the process: http://www.holisticmed.com/aspartame/abuse/seizures.html

These are the ones on seizures. If you want more just let me know. They are pro's at flawed studies. In fact, the FDA audit, the Bressler Report is included in this article where I showed the FDA admitted to destroying incriminating aspartame information that was left out of that report: http://www.mpwhi.com/fda_gate.htm

As to economics, its about time there is concern about the mass poisoning of the public with this deadly poison. You will notice in this New York Times article after Dr. Soffritti did the Ramazzini Study peer reviewed by 7 world experts showing aspartame to be a multipotential carcinogen, the FDA was asked why they didn't ban aspartame: http://www.nytimes.com/2006/02/12/business/yourmoney/12sweet.html?pagewanted=all

Notice the only concern of the FDA was the economics of the manufacturers. The FDA should be so concerned about safe food and drugs and the health of a nation, and even the world.

When I lectured in New Zealand when Abby Cormack almost died from Wrigley's aspartame gum http://www.mpwhi.com/abby_cormack_story.htm I spoke with Food Standards. They assured me there had been no studies in NZ and they relied on the FDA. So the FDA is responsible for all these sick people like Abby because they lied about aspartame safety. Because of the publicity in NZ a lot of companies are taking a stand and warning about aspartame: http://www.mpwhi.com/beginning_to_feel_like_victory.htm The Safe Food Campaign of New Zealand has a petition for ban. alison@safefood.org.nz Here is the whole New Zealand story published in "Investigate" - Dying For a Diet Coke, by journalist extraordinaire , Chris Wheeler, Mission Possible New Zealand: http://www.rense.com/general78/dying.htm

Understand until Don Rumsfeld (Rumsfeld's Plague) the FDA did speak out about aspartame. Here is what their FDA toxicologist told Congress:

On August 1, l985 the FDA's own toxicologist, Dr. Adrian Gross, told Congress at least one of Searle's studies "has established beyond ANY REASONABLE DOUBT that aspartame is capable of inducing brain tumors in experimental animals and that this predisposition of it is of extremely high significance. ... In view of these indications that the cancer causing potential of aspartame is a matter that had been established WAY BEYOND ANY REASONABLE DOUBT, one can ask: What is the reason for the apparent refusal by the FDA to invoke for this food additive the so-called Delaney Amendment to the Food, Drug and Cosmetic Act?"

The Delaney Amendment makes it illegal to allow any residues of cancer causing chemicals in foods. In his concluding testimony Gross asked, "Given the cancer causing potential of aspartame how would the FDA justify its position that it views a certain amount of aspartame as constituting an allowable daily intake or 'safe' level of it? Is that position in effect not equivalent to setting a 'tolerance' for this food additive and thus a violation of that law? And if the FDA itself elects to violate the law, who is left to protect the health of the public?" Congressional Record SID835:131 (August 1, l985)

So here is the admission by the FDA toxicologist who was on site that the FDA violated the law, and that's why this deadly poison is on the market today.

Dr. John Olney who founded the field of neuroscience called excitotoxicity and tried to prevent approval, wrote a 49 page report to the Board of Inquiry on how it would destroy the brains of our children, and the unborn. Here is that report: http://www.wnho.net/dr_olney1.doc Here's the Report For Schools, articles by renowned aspartame experts to save the children: http://www.mpwhi.com/report_on_aspartame_and_children.htm

This was necessary because Dr. Olney's prophecy was fulfilled and aspartame has destroyed a generation of children. It's an abortifacient and teratogen (triggers birth defects) and endocrine disrupting agent. Everything is a matter of public record. Lobbyists, flacks, front groups, the manufacturers and paid prostitutes weave stories of deceit, but the simple truth is like Dr. James Bowen told the FDA 20 years ago, aspartame is mass poisoning of the world: http://www.dorway.com/drbowen.txt

I hope you will continue to broadcast the facts and help the people of Hawaii know the truth and set the ones who use it free of their afflictions. Here is the paper by neurosurgeon Russell Blaylock, M.D., "What To Do If You Have Used Aspartame", www.wnho.net/wtdaspartame.htm

If you wish to show the aspartame documentary, Sweet Misery: A Poisoned World, on TV please contact www.soundandfury.tv

All my best,

Betty

www.mpwhi.com, www.dorway.com and www.wnho.net Aspartame Toxicity Center, www.holisticmed.com/aspartame

testimony

From: Warren Woodward [w6345789@yahoo.com]
Sent: Thursday, February 21, 2008 11:32 PM
To: testimony
Subject: SB2506 testimony

To: Senator David Y. Ige, Chair, Senate Committee on Health

From: Warren Woodward, 8805 Kula Hwy,, Kula, Hawaii 96790. 808 878 3103

Re: In support of SB2506, RELATING TO FOOD, being heard by HTH on Monday, February 25, 2008, at 1:15 pm in conference room 016.

Testimony: Aspartame is, by far, the most dangerous substance on the market that is added to foods.

Aspartame is the technical name for the brand names NutraSweet, Equal, Spoonful, and Equal-Measure. It was discovered by accident in 1965 when James Schlatter, a chemist of G.D. Searle Company, was testing an anti-ulcer drug.

Aspartame was approved for dry goods in 1981 and for carbonated beverages in 1983. It was originally approved for dry goods on July 26, 1974, but objections filed by neuroscience researcher Dr John W. Olney and Consumer attorney James Turner in August 1974 as well as investigations of G.D. Searle's research practices caused the U.S. Food and Drug Administration (FDA) to put approval of aspartame on hold (December 5, 1974). In 1985, Monsanto purchased G.D. Searle and made Searle Pharmaceuticals and The NutraSweet Company separate subsidiaries.

Aspartame accounts for over 75 percent of the adverse reactions to food additives reported to the FDA. Many of these reactions are very serious including seizures and death.(1) A few of the 90 different documented symptoms listed in the report as being caused by aspartame include: Headaches/migraines, dizziness, seizures, nausea, numbness, muscle spasms, weight gain, rashes, depression, fatigue, irritability, tachycardia, insomnia, vision problems, hearing loss, heart palpitations, breathing difficulties, anxiety attacks, slurred speech, loss of taste, tinnitus, vertigo, memory loss, and joint pain. According to researchers and physicians studying the adverse effects of aspartame, the following chronic illnesses can be triggered or worsened by ingesting of aspartame:(2) Brain tumors, multiple sclerosis, epilepsy, chronic fatigue syndrome, parkinson's disease, alzheimer's, mental retardation, lymphoma, birth defects, fibromyalgia, and diabetes.

Aspartame is made up of three chemicals: aspartic acid, phenylalanine, and methanol. The book "Prescription for Nutritional Healing," by James and Phyllis Balch, lists aspartame under the category of "chemical poison." As you shall see, that is exactly what it is.

What Is Aspartame Made Of?

Aspartic Acid (40 percent of aspartame)

Dr. Russell L. Blaylock, a professor of neurosurgery at the Medical University of Mississippi, recently published a book thoroughly detailing the damage that is caused by the ingestion of excessive aspartic acid from aspartame. Blaylock makes use of almost 500 scientific references to show how excess free excitatory amino acids such as aspartic acid and glutamic acid (about 99 percent of monosodium glutamate (MSG) is glutamic acid) in our food supply are causing serious chronic neurological disorders and a myriad of other acute symptoms.(3)

How Aspartate (and Glutamate) Cause Damage

Aspartate and glutamate act as neurotransmitters in the brain by facilitating the transmission of information from neuron to neuron. Too much aspartate or glutamate in the brain kills certain neurons

by allowing the influx of too much calcium into the cells. This influx triggers excessive amounts of free radicals, which kill the cells. The neural cell damage that can be caused by excessive aspartate and glutamate is why they are referred to as "excitotoxins." They "excite" or stimulate the neural cells to death.
Aspartic acid is an amino acid. Taken in its free form (unbound to proteins) it significantly raises the blood plasma level of aspartate and glutamate. The excess aspartate and glutamate in the blood plasma shortly after ingesting aspartame or products with free glutamic acid (glutamate precursor) leads to a high level of those neurotransmitters in certain areas of the brain.
The blood brain barrier (BBB), which normally protects the brain from excess glutamate and aspartate as well as toxins, 1) is not fully developed during childhood, 2) does not fully protect all areas of the brain, 3) is damaged by numerous chronic and acute conditions, and 4) allows seepage of excess glutamate and aspartate into the brain even when intact.
The excess glutamate and aspartate slowly begin to destroy neurons. The large majority (75 percent or more) of neural cells in a particular area of the brain are killed before any clinical symptoms of a chronic illness are noticed. A few of the many chronic illnesses that have been shown to be contributed to by long-term exposure to excitatory amino acid damage include:

- Multiple sclerosis (MS)
- ALS
- Memory loss
- Hormonal problems
- Hearing loss
- Epilepsy
- Alzheimer's disease
- Parkinson's disease
- Hypoglycemia
- AIDS
- Dementia
- Brain lesions
- Neuroendocrine disorders

The risk to infants, children, pregnant women, the elderly and persons with certain chronic health problems from excitotoxins are great. Even the Federation of American Societies for Experimental Biology (FASEB), which usually understates problems and mimics the FDA party-line, recently stated in a review that:
"It is prudent to avoid the use of dietary supplements of L-glutamic acid by pregnant women, infants, and children. The existence of evidence of potential endocrine responses, i.e., elevated cortisol and prolactin, and differential responses between males and females, would also suggest a neuroendocrine link and that supplemental L-glutamic acid should be avoided by women of childbearing age and individuals with affective disorders."(4)
Aspartic acid from aspartame has the same deleterious effects on the body as glutamic acid.
The exact mechanism of acute reactions to excess free glutamate and aspartate is currently being debated. As reported to the FDA, those reactions include:(5)

- Headaches/migraines
- Nausea
- Abdominal pains
- Fatigue (blocks sufficient glucose entry into brain)
- Sleep problems
- Vision problems
- Anxiety attacks

- Depression
- Asthma/chest tightness.

One common complaint of persons suffering from the effect of aspartame is memory loss. Ironically, in 1987, G.D. Searle, the manufacturer of aspartame, undertook a search for a drug to combat memory loss caused by excitatory amino acid damage. Blaylock is one of many scientists and physicians who are concerned about excitatory amino acid damage caused by ingestion of aspartame and MSG.
A few of the many experts who have spoken out against the damage being caused by aspartate and glutamate include Adrienne Samuels, Ph.D., an experimental psychologist specializing in research design. Another is Olney, a professor in the department of psychiatry, School of Medicine, Washington University, a neuroscientist and researcher, and one of the world's foremost authorities on excitotoxins. (He informed Searle in 1971 that aspartic acid caused holes in the brains of mice.)

Phenylalanine (50 percent of aspartame)

Phenylalanine is an amino acid normally found in the brain. Persons with the genetic disorder phenylketonuria (PKU) cannot metabolize phenylalanine. This leads to dangerously high levels of phenylalanine in the brain (sometimes lethal). It has been shown that ingesting aspartame, especially along with carbohydrates, can lead to excess levels of phenylalanine in the brain even in persons who do not have PKU.
This is not just a theory, as many people who have eaten large amounts of aspartame over a long period of time and do not have PKU have been shown to have excessive levels of phenylalanine in the blood. Excessive levels of phenylalanine in the brain can cause the levels of seratonin in the brain to decrease, leading to emotional disorders such as depression. It was shown in human testing that phenylalanine levels of the blood were increased significantly in human subjects who chronically used aspartame.(6) Even a single use of aspartame raised the blood phenylalanine levels. In his testimony before the U.S. Congress, Dr. Louis J. Elsas showed that high blood phenylalanine can be concentrated in parts of the brain and is especially dangerous for infants and fetuses. He also showed that phenylalanine is metabolised much more effeciently by rodents than by humans.(7)
One account of a case of extremely high phenylalanine levels caused by aspartame was recently published the "Wednesday Journal" in an article titled "An Aspartame Nightmare." John Cook began drinking six to eight diet drinks every day. His symptoms started out as memory loss and frequent headaches. He began to crave more aspartame-sweetened drinks. His condition deteriorated so much that he experienced wide mood swings and violent rages. Even though he did not suffer from PKU, a blood test revealed a phenylalanine level of 80 mg/dl. He also showed abnormal brain function and brain damage. After he kicked his aspartame habit, his symptoms improved dramatically.(8)
As Blaylock points out in his book, early studies measuring phenylalanine buildup in the brain were flawed. Investigators who measured specific brain regions and not the average throughout the brain notice significant rises in phenylalanine levels. Specifically the hypothalamus, medulla oblongata, and corpus striatum areas of the brain had the largest increases in phenylalanine. Blaylock goes on to point out that excessive buildup of phenylalanine in the brain can cause schizophrenia or make one more susceptible to seizures.
Therefore, long-term, excessive use of aspartame may provid a boost to sales of seratonin reuptake inhibitors such as Prozac and drugs to control schizophrenia and seizures.

Methanol (aka wood alcohol/poison) (10 percent of aspartame)

Methanol/wood alcohol is a deadly poison. Some people may remember methanol as the poison that has caused some "skid row" alcoholics to end up blind or dead. Methanol is gradually released in the small intestine when the methyl group of aspartame encounter the enzyme chymotrypsin.
The absorption of methanol into the body is sped up considerably when free methanol is ingested. Free methanol is created from aspartame when it is heated to above 86 Fahrenheit (30 Centigrade). This would occur when aspartame-containing product is improperly stored or when it is heated (e.g., as part of a "food" product such as Jello).
Methanol breaks down into formic acid and formaldehyde in the body. Formaldehyde is a deadly

neurotoxin. An EPA assessment of methanol states that methanol "is considered a cumulative poison due to the low rate of excretion once it is absorbed. In the body, methanol is oxidized to formaldehyde and formic acid; both of these metabolites are toxic." They recommend a limit of consumption of 7.8 mg/day. A one-liter (approx. 1 quart) aspartame-sweetened beverage contains about 56 mg of methanol. Heavy users of aspartame-containing products consume as much as 250 mg of methanol daily or 32 times the EPA limit.(9)

Symptoms from methanol poisoning include headaches, ear buzzing, dizziness, nausea, gastrointestinal disturbances, weakness, vertigo, chills, memory lapses, numbness and shooting pains in the extremities, behavioral disturbances, and neuritis. The most well known problems from methanol poisoning are vision problems including misty vision, progressive contraction of visual fields, blurring of vision, obscuration of vision, retinal damage, and blindness. Formaldehyde is a known carcinogen, causes retinal damage, interferes with DNA replication and causes birth defects.(10)

Due to the lack of a couple of key enzymes, humans are many times more sensitive to the toxic effects of methanol than animals. Therefore, tests of aspartame or methanol on animals do not accurately reflect the danger for humans. As pointed out by Dr. Woodrow C. Monte, director of the food science and nutrition laboratory at Arizona State University, "There are no human or mammalian studies to evaluate the possible mutagenic, teratogenic or carcinogenic effects of chronic administration of methyl alcohol."(11)

He was so concerned about the unresolved safety issues that he filed suit with the FDA requesting a hearing to address these issues. He asked the FDA to "slow down on this soft drink issue long enough to answer some of the important questions. It's not fair that you are leaving the full burden of proof on the few of us who are concerned and have such limited resources. You must remember that you are the American public's last defense. Once you allow usage (of aspartame) there is literally nothing I or my colleagues can do to reverse the course. Aspartame will then join saccharin, the sulfiting agents, and God knows how many other questionable compounds enjoined to insult the human constitution with governmental approval."(10) Shortly thereafter, the Commissioner of the FDA, Arthur Hull Hayes, Jr., approved the use of aspartame in carbonated beverages, he then left for a position with G.D. Searle's public relations firm.(11)

It has been pointed out that some fruit juices and alcoholic beverages contain small amounts of methanol. It is important to remember, however, that methanol never appears alone. In every case, ethanol is present, usually in much higher amounts. Ethanol is an antidote for methanol toxicity in humans.(9) The troops of Desert Storm were "treated" to large amounts of aspartame-sweetened beverages, which had been heated to over 86 degrees F in the Saudi Arabian sun. Many of them returned home with numerous disorders similar to what has been seen in persons who have been chemically poisoned by formaldehyde. The free methanol in the beverages may have been a contributing factor in these illnesses. Other breakdown products of aspartame such as DKP (discussed below) may also have been a factor.

In a 1993 act that can only be described as "unconscionable," the FDA approved aspartame as an ingredient in numerous food items that would always be heated to above 86 degree F (30 degree C).

Diketopiperazine (DKP)

DKP is a byproduct of aspartame metabolism. DKP has been implicated in the occurrence of brain tumors. Olney noticed that DKP, when nitrosated in the gut, produced a compound that was similar to N-nitrosourea, a powerful brain tumor causing chemical. Some authors have said that DKP is produced after aspartame ingestion. I am not sure if that is correct. It is definitely true that DKP is formed in liquid aspartame-containing products during prolonged storage.

G.D. Searle conducted animal experiments on the safety of DKP. The FDA found numerous experimental errors occurred, including "clerical errors, mixed-up animals, animals not getting drugs they were supposed to get, pathological specimens lost because of improper handling," and many other errors.(12) These sloppy laboratory procedures may explain why both the test and control animals had sixteen times more brain tumors than would be expected in experiments of this length.

In an ironic twist, shortly after these experimental errors were discovered, the FDA used guidelines

recommended by G.D. Searle to develop the industry-wide FDA standards for good laboratory practices. (11)
DKP has also been implicated as a cause of uterine polyps and changes in blood cholesterol by FDA Toxicologist Dr. Jacqueline Verrett in her testimony before the U.S. Senate.(13)

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testimony

From: Sen. Donna Mercado Kim
Sent: Friday, February 22, 2008 6:41 AM
To: testimony
Cc: 'Robert Domingos'
Subject: For HTH Committee hearing on February 25, 2008 at 1:15 pm. Conf. Rm. 016

SB2506 Public Hearing Monday Feb 25, Conf Rm 016 TESTIMONY FOLLOWS

I teach in a rural high school on the Big Island. My students drink a lot of diet soda and love li hing mui. Some of them li hing almost any fruit.

When I read about the terrible effects of Aspartame, my heart goes out to the innocent ones who are poisoning themselves. SB2506 is correct when it provides for a ban on this toxic substance. It should pass.

Robert Domingos Souza PhD
Wai'ohinu HI 96772

testimony

From: merek [merek@hialoha.net]
Sent: Friday, February 22, 2008 8:57 AM
To: testimony
Cc: Angela Rosa; Alan Thal
Subject: Reference the Aspartame banning Bill Monday Feb. 25 2008

I am so happy that our far sighted Senate is finally dealing with this environmental killer . It was Rumsfeldt
who was able to get approval for aspartame from the FDA and suppress the danders ,He then, as CEO, profited, while Americans suffered most serious side effects,...The studies are all in, This substance is a carcinogenic killer.....We have a healthful sugar like substitute "XYLITOL" made from sugar alcohol that is good for teeth, Keeps carb levels low and helps dieters lose weight ,It costs more as a sweetner than aspartame but has no serious health issues or side affects .
PLEASE ban this horrid Aspartame substance, Don' let lobbyist pressure fold you and great thanks to all you Senator Ige and fellow Senators for paying attention to our health issues.

Capt Merek Edward Mura ret.
West Hawaii Veterans Inc.
PO Box 1156 Kapaau, Hi 96755
808 889 0310

Kanoe Kamanao

From: Al Vorne [alvorne@hawaii.rr.com]
Sent: Thursday, February 21, 2008 5:14 PM
To: Sen. David Ige
Subject: Ban Aspartame

Ban Aspartame in Hawaii - Protect the people from the neurodegenerative effects from aspartame. Represent us and not the lobbyists

Al Vorne

PO Box 67

Puunene, HI 96784

The effects of aspartame on infants and children

It has been known for centuries that methanol is a neurotoxin. Therefore we should minimize infants and children exposure to products containing it. Aspartame not only contains 10 percent free methanol, additional methanol is created as aspartame metabolizes in the body. No safe limit for methanol has ever been determined. That means any level of exposure to methanol is unsafe. Just imagine the damage daily doses of methanol-containing aspartame could have on the central nervous systems of infants and children. Now go to your nearest grocery store and look at all the aspartame-containing products being marketed to children and ask yourself: Could this be one of the reasons why the numbers of neurologically-impaired and sociopathic children requiring special care and instruction are rising at an alarming rate?

WARNING: School children at risk!

The Institutes of Medicine has declared war on childhood obesity. Opportunists in the beverage industry have responded by declaring war on obese children. To capitalize on the marketplace niche opening as schools ban the sale of sugar drinks on school grounds, companies such as American WaterSTar have announced their intention to market artificially flavored and sweetened beverages for school children. While over consumption of sugar is not healthy and banning sales of sugar-containing junk food on school campuses is a good idea, replacing sugar with aspartame is not the answer. Following is Dr. H.J. Robert's open warning to parents and schools regarding children's consumption of aspartame-containing drinks.

The momentum for reducing the amount of soda pop consumed by children, especially from dispensing machines at schools, has increased. It is justified by the documented contribution of the sugar therein to serious disorders, especially obesity and other problems.

Imaginative entrepreneurs now seek to substitute an array of palatable "sugar free, caffeine free," and "calorie free" drinks having appealing brand names. They plan to actively promote them to students and school systems, using celebrities such as professional athletes as pitchmen.

Unfortunately, there is a major public health problem when aspartame—commonly known as NutraSweet® and Equal®—is the sweetening agent. I have repeatedly stated my professional opinion, based on the scores of children in my database of aspartame reactors, that they should not take aspartame products–including beverages, foods, vitamins, drugs, gum and supplements.

Each of the components of this chemical (phenylalanine; aspartic acid; the methyl ester, which promptly becomes FREE methyl alcohol) and their multiple breakdown products can damage the developing brain.

Aspartame-induced disorders in children include headache, confusion, convulsions, irritability, depression, intellectual deterioration, antisocial behavior, rashes, asthma and unstable diabetes. Addiction to aspartame products also has become a problem. The details appear in my publications, particularly *Aspartame Disease: An Ignored Epidemic* (www.sunsentpress.com).

There also are reservations about the long term use of sucralose, another popular sweetening agent, in these substitute drinks because of the adverse effects noted in animal studies.

In view of this perceived imminent public health threat, I believe that parents, physicians, other health care professionals, school boards and consumer advocates have an obligation to monitor and guide their communities regarding such exposure. They can expect formidable corporate and bureaucratic resistance, particularly from the FDA and groups supported by this huge industry.

H. J. Roberts, M.D., FACP, FCCP
Palm Beach Institute for Medical Research
West Palm Beach, Florida

Observations from Dr. Miguel Baret Daniel of the Dominican Republic:

A pediatrician friend of mine and I have been giving nutritional support to children with diabetes. Since cow's milk has a specific protein which causes diabetes, especially in children, I remove milk from their diet.

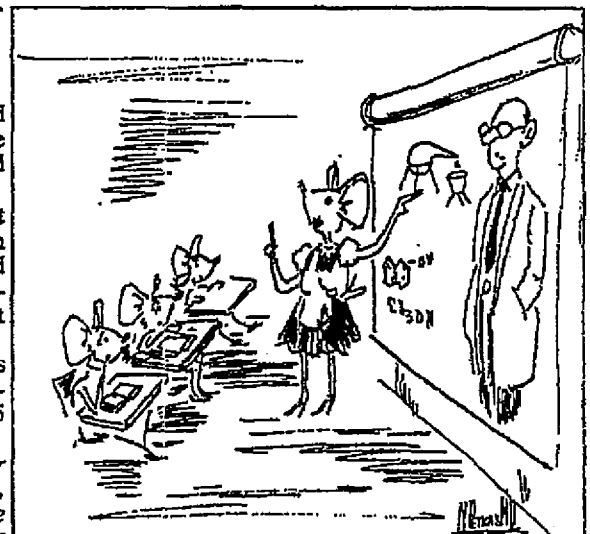
I removed milk from the diets of about 360 children studying in public schools in my country. Though these 360 children were not diabetics, I removed the milk from their diet for diabetes prevention. At one point my pediatrician friend and I started noticing that a considerable number of these 360 children were exhibiting abnormal levels of restlessness, a lack of concentration, irritability and depression, in some.

At the beginning I suspected it was happening because the extreme heat we were having in my country in those days. But then the weather changed and the situation didn't get better. So, I took a look at their diet and discovered ALL of them were drinking a lot of one kind of concentrated juice sweetened with ASPARTAME.

They drank some six ounces of that juice twice a day, some times between classes. So, I talked to their parents and asked them to press upon their children that they should not drink that juice anymore for a while.

The results were as astonishing as the very situation I was trying to correct: The symptoms disappeared in 4-5 days in ALL of them.

Note: *Dr. Baret, an orthomolecular medicine practitioner and naturopath, became so interested in knowing more about Nutrasweet and/or aspartame he has asked Mission Possible to help him write a simple pamphlet about aspartame for distribution to school administrators in the Dominican Republic.*



And be particularly careful with funny-looking humans with long white coats; they could give you cancer!

Senator David Ige
Senate Health Committee

This is a cover letter for 34 letters of testimony that we wish to have heard on Mon. February 25, 2008 Our community had the unfortunate situation of having previously faxed letters, signed petitions, e-Mails etc. rather 'conveniently' LOST!

Aspartame is deadly. I personally witnessed my sister go blind from documented changes to her optic nerve while her vision kept declining.

I sincerely hope you have taken the time to view 'Sweet Misery' the documentary that was made available to your office.

Aspartame is a very toxic neurotoxin. It is concentrated 40 times in the human according to Blaylock's book. There also was a study on pregnant mice. When the baby mice were born the aspartame was found concentrated on the retina. The drug concentration in the mother is doubled through the placenta.

On behalf of our children and grandchildren have the POISON removed from children's chewable vitamins, diet soda and also all the medications that are

[illegible]

[illegible]

to make sure these letters are acceptable as testimony

Sen. David IGE

Senate Health Committee

Representative Josh Green,

It is unfortunate that our letters, signed petitions and faxed testimonies mysteriously did not reach Mele Carroll's office. We are committed to the bill banning aspartame. Aspartame is a dangerous drug that should never have been approved by the FDA!

There is an accumulation of long-standing intensive research into the brain chemistry-altering effects of toxic artificial sweetener consumed daily by hundreds of millions of unsuspecting individuals. (James Bowen, M.D Brain Cell Damage From Amino Acid Isolates: A Primary concern from Aspartame-based Products and Artificial Sweetening Agents)

The willful and knowing poisoning of all peoples needs to stop!

Sincerely

Renee N. K. Yasso

Sen. David IGE

Senate Health Committee

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The willful and knowing poisoning of all peoples needs to stop!

Sincerely

Krista Hightower Krista Hightower
1477 Maunaloa Hwy Kaunakakai, HI
96748

Sen. David IGE
Senate Health Committee
~~Representative~~ Josh Green,

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The willful and knowing poisoning of all peoples needs to stop!

Sincerely Julie Turner / Julie Turner
PO Box 1629
Kawaikaki, HI 96748
2/13/08

P.S.
No Floride in Water
Nice Mind

Sen. David IGE

Senate Health Committee

Representative Josh Green,

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The willful and knowing poisoning of all peoples needs to stop!

Sincerely Paul Marinos

P.S. No Flouride in the water
I... the TARO Alone.

PAUL MARINOS
P.O. Box 1508
Kaunakakai, Molokai, HI
96748

Sen. David IGE

Senate Health Committee

~~Representative~~ Josh Green,

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The willful and knowing poisoning of all peoples needs to stop!

Sincerely

Alaina Hinau-Needham
HC1 Box 168

Alaina Hinau-Needham

Sen. David IGE

~~Senate~~ Health Committee

~~Representative Josh Green~~,

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The willful and knowing poisoning of all peoples needs to stop!

Sincerely

Mikala Hinau-Nanod
218A Hiolani St.
Pukalani HI.

Sen. David IGE
Senate Health Committee

~~Representative~~ Josh Green,

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The willful and knowing poisoning of all peoples needs to stop!

Sincerely,

Glenda Kahoohanohano

GLENDA KAHOOHANOHANO

Sen. David IGE
Senate Health Committee

Representative Josh Green,

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The willful and knowing poisoning of all peoples needs to stop!

Sincerely

Lynda Lloyd
PO Box 482137
Kaneohe, Hi 96748

PS:
20 Flouride in

Sen. David IGE

~~Senate~~ Health Committee

~~Representative Josh Green~~,

It is unfortunate that our letters, signed petitions and faxed testimonies mysteriously did not reach ~~your~~ McCarroll's office. We are committed to the bill banning aspartame. Aspartame is a dangerous drug that should never have been approved by the FDA!

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The willful and knowing poisoning of all peoples needs to stop!

Sincerely Kathleen V. Nolan

P.O. Box 1215

P.S. Override the veto!

Sen. David IGE
Senate Health Committee

~~Representative~~ Josh Green,

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The willful and knowing poisoning of all people needs to stop!

Sincerely
Artice Swingle Artice Swingle
P.O. Box 121
K...

Sen. David IGE

~~Senate Health~~ Committee

~~Representative Josh Green~~,

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The willful and knowing poisoning of all peoples needs to stop!

Sincerely

David Cole

Kamuela, Hi

P.S Leave the room!

Sen. David IGE
~~Senate~~ Health Committee

~~Representative~~ Josh Green,

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The willful and knowing poisoning of all peoples needs to stop!

Sincerely

Richard [illegible] Kihei, HI 96753

~~K~~, P.S. No Fluoride in Water

Sen. David IGE
Senate Health Committee

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The willful and knowing poisoning of all peoples needs to stop!

Sincerely, Carol Franko

CAROL FRANKO
PO Box 127
Kaluna Kakai HI 96748
808 553-5905

Sen. David Ige

~~Senate~~ Health Committee

~~Representative Josh Green~~,

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The willful and knowing poisoning of all people needs to stop!

Sincerely Michael Deschene

Michael Deschene
PO Box 1215
Kaunakakai, HI 96748

P.S. Leave the TARO alone! No Fluoride in Water

Sen. David : GE
Senate Health Committee

Representative Josh Green

It is unfortunate that our letters, signed petitions and faxed testimonies mysteriously did not reach Mele Carroll's your office. We are committed to the bill banning aspartame. Aspartame is a dangerous drug that should never have been approved by the FDA!

There is an accumulation of long-standing intensive research into the brain chemistry-altering effects of toxic artificial sweetener consumed daily by hundreds of millions of unsuspecting individuals. (James Bowen, M.D Brain Cell Damage From Amino Acid Isolates: A Primary concern from Aspartame-based Products and Artificial Sweetening Agents)

The willful and knowing poisoning of all peoples needs to stop!

Sincerely Edward K. Hoodkue
HC-01, Box 542
Kaunakakai, HI

P.S. Leave The Taro alone!

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Senate Health Committee

~~Representative~~ Josh Green,

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Sincerely Josh Graham

534 Hoaka Drive

Sen David IGE
~~Senate~~ Health Committee

~~Representative~~ Josh Green,

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Sincerely

Martha M. Sullivan
6377 Lake Dr
Longmont, CO 80503

PS Leave the taro Alone
.. ..side in

Sen. David IGE
Senate Health Committee

~~Representative Josh Green~~

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The willful and knowing poisoning of all people needs to stop!

Sincerely Susan J. Goodue

HC-01 Box 542
Kaunakakai, HI 96748

2.5 A Day: [illegible]

testimony

From: Mary Sky [maryskyschoolcraft@yahoo.com]
Sent: Saturday, February 23, 2008 7:50 AM
To: testimony
Subject: Aspartame

Please accept this as testimony to support a BAN on Aspartame.

The studies are all in, This substance is a carcinogenic killer. We have healthful sugars like plant derived Agave or "XYLITOL" (made from sugar alcohol) which are good for teeth, keeps glycemic levels low and helps dieters lose weight. They cost more as a sweetner than aspartame but have no serious health issues or side affects .

PLEASE ban this horrid Aspartame substance, Don' let lobbyist pressure you. Great thanks to Senator Ige and fellow Senators for paying attention to our health issues.

This is for the benefit of the public and all our future generations too!

Mahalo and Aloha,
Mary Sky Schoolcraft
Kapaau, Hawaii

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testimony

From: Angela Rosa [essentialhealth@webtv.net]
Sent: Saturday, February 23, 2008 2:49 PM
To: testimony
Subject: Aspartame

Please do all you can to ban the use of the poison Aspartame. IT is long over due. As a Licensed Health Professional I have known about this deadly poison's ill effect on our citizen's health. IT IS TIME TO TAKE A STAND. Please get this banned now once and for all.
Thank you,
Angela Rosa
PO BOX 43
Hawi, Hi 96719

http://community.webtv.net/essentialhealth/ESSENTIALHEALTH

We honor a higher order of consciousness by finding the courage to speak our truth, end our isolation and change our stories to create a new course for our future. David Korten "The Great Turning"

To: Senate Sgt-At-Arms FAX 586-6659

COMMITTEE ON HEALTH
Senator David Ige, Chairman
Senator Carol Fukunaga, Vice Chair

DATE: Monday, February 25, 2008
TIME: 1:15 p.m.
PLACE: Conference Room 016, State Capitol

SB 2506 RELATING TO FOOD - Bans the use of the artificial sweetener aspartame in food products.

Please support the ban.

As long as there is evidence that a product is not safe, we should remove it from the shelves like we did for product recalls over the years.

Aspartame, chemically, produces methanol which is metabolized in the body to formaldehyde, a very toxic substance. Free methanol is created from aspartame when it is heated to above 86° F. Therefore, safety of diet sodas or products containing aspartame being delivered or stored in warehouses or anywhere are compromised. It is also undesirable as a baking sweetener.

Therefore, Why then is aspartame promoted and used in so many products, knowing that it is not safe?

We need the ban to serve as a time for the proponents to have studies done to prove the safety of the product. This has to be done by an independent, impartial body.

Will appreciate your vote to support the ban.

Mahalo and Aloha,

Ruth Nakasone
Pearl City

request written comments be inserted into official record

testimony

From: Charles LHeureux [kohalacharles@yahoo.com]
Sent: Sunday, February 24, 2008 8:40 PM
To: testimony
Subject: aspartame

Aloha,
I have read about this toxin for about 15 years, and wonder why more people are not aware of its dangers. Please ban it here.
Charles L'Heureux
Kapaau

---

testimony

From: Lisa Long [angelsfortruth@earthlink.net]
Sent: Friday, February 22, 2008 3:16 PM
To: testimony; senige@capitol.hawaii.gov
Subject: Testimony in support of bill SB2506 Ban Aspartame, hearing in Senate Health, Room 16; 1:15 PM, 2/25

PLEASE XEROX AS COMMITTEE HANDOUT FOR THIS HEARING

To THE HON. SENATORS AND MEMBERS OF THE COMMITTEE

Testimony in support of bill SB 2506 re: Ban Aspartame in Hawaii

Ban this horrible substance in Hawaii.

Let's start to undo the evil that has been pushed on us by the NWO.

Let US in Hawaii set National and World standards to protect our children from corporate poisons.

Please ban this horrible substance.

Watch the two short videos at the link below.

http://www.nwotruth.com/rumsfelds-bioweapon-legacy-aspertame-aka-nutrasweet-equal-canderel/

---

some articles from Mercola.com

Dangers - Read this important article on the dangers of aspartame first, and then return to this page if you're interested in many other relevant insights and resources on this topic.

Books - Books about Aspartame, Nutrasweet, and Refined Sugar dangers

The Deadly Deception of Aspartame by the FDA and Searle - "The Deadly Deception" cites chapter and verse of the coverup by Searle and the FDA. See some of the highlights from the book "The Deadly Deception":

History of Aspartame - A history of Fraud and Deception.

Governments Coverup Aspartame - FDA "findings" on Aspartame remain based on faked tests.

Gulf War - Aspartame Dosing of the Military in the Gulf War.

Hidden Dangers of Aspartame - Aspartame: What You Don't Know Can Hurt You

Not Natural - Studies prove Aspartame is not a natural product.

Aspartame Symptoms - Seizures and headaches are among the most common complaints reported by Aspartame users.

Reseach Findings on Dangers on Aspartame - Author Mary Nash Stoddard presents research findings at July 1995 Tesla Conference, before several hundred attendees.

God Bless,
Lisa Long
P.O. Box 369
Holualoa, HI 96725
808-329-7221

http://AngelsForTruth.com
http://MothersForTruth.com
http://ResurrectingLiberty.com
http://HawaiiBeat.com

testimony

From: Stephen Fox [stephen@santafefineart.com]
Sent: Thursday, February 21, 2008 4:12 PM
To: testimony
Subject: NM Senator Gerald Ortiz y Pino, Sponsor of Aspartame bill writes support letter to Hawaii Senate Health Committee Members,SB 2506, 2/25; 1:15, Room 16

NM Senate sponsor of Aspartame bill writes support letter to Hawaii Senate Health Committee 02/22/08

Dear Chairman Ige, Vice Chair Fukunaga, Senator Baker, Senator Menor, and Senator Whalen:

As a fellow legislator and member of the New Mexico State Senate, I write to you now to say that I support your efforts to ban aspartame. I am concerned that there is incontrovertible medical evidence that ingesting aspartame, which includes methanol and formaldehyde, is doing entirely avoidable, terrible, medical damage, particularly in causing neurodegenerative illnesses. An ordinary precautionary principle would strongly indicate that it should be off the market until proven completely safe, and not just by studies paid for by industry supporters.

Unfortunately, the FDA has shown no interest in rescinding its approval thus far. Hawaii, though, is in a strong position to limit or entirely prevent it from being imported in products coming from the U.S. mainland and foreign countries. Please do not give in to the corporate lobbyists' theories of federal pre-emption; they were advanced by corporations in New Mexico's legislature in 2006 and in 2007 and succeeded in killing the bills which I carried.

I hope you will give your bill a "do pass" in your Health Committee. This will also send a very strong message to the FDA Commissioner that corporate theories and corporate misrepresentations are not going to prevail in Honolulu, even if they have temporarily succeeded in Santa Fe!

Thank you for your time and consideration, and please let me know if you have any questions.

Truly,

Senator Gerald Ortiz y Pino
505 250-1280

testimony

From: Stephen Fox [stephen@santafefineart.com]
Sent: Thursday, February 21, 2008 4:47 PM
To: testimony
Subject: SB2506 to ban aspartame, Testimony By Dr. HJ Roberts, M.D. Internist and Author/ 2/25 SB 2506 Room 16, !:15

2/22, 2008 Dear Senator Ige, Senator Fukunaga, Senator Whalen, Senator Menor, and Senator Baker:

I strongly urge the removal of aspartame products frim the market in Hawaii, based on clinical observations and extensive corporate-neutral research on aspartame disease for over a quarter century. The medical and public health basis for this recommendation has been detailed in my numerous original articles/letters and four books -- including the 1000-page text "Aspartame Disease: An Ignored Epidemic.

The widespread existence of severe reactions to aspartame products remains a tragedy and disgrace that not only has endangered our population, but also future generations. The FDA has failed to act on the matter notwithstanding an enormous amount of clinical and scientific evidence. My data base alone reflects over 1400 victims.

I admire your courage and that of your colleagues in tackling this issue despite the inevitable corporate and political pressures to ignore it. You are essentially pioneering the correction of a major public health problem for the entire country... and the world.

I extend my best wishes. If you have any questions, please let me know.

H. J. Roberts, M.D., FACP, FCCP
561-588-7628
West Palm Beach, Florida

testimony

From: Stephen Fox [stephen@santafefineart.com]
Sent: Thursday, February 21, 2008 4:55 PM
To: testimony
Subject: SB2506 to ban aspartame, Testimony By Dr. HJ Roberts, M.D. Internist and Author/ 2/25 SB 2506 Room 16, !:15

2/22, 2008

Dear Senator Ige, Senator Fukunaga, Senator Whalen, Senator Menor, and Senator Baker:

As an aspartame user for well over 20-years, I know firsthand what this chemical can do - vision problems, memory difficulties, severe headaches, mood swings, weight gain, rigors, anemia, dehydration, and addiction.

After taking aspartame out of my home and life, I have started to regain my health and the headaches have virtually disappeared. I no longer use anything with this deadly chemical and commend you for taking the same stand. If not for people such as this committee, people living and visiting Hawaii would go on to have the many ailments or even death. What better way to let the Hawaiian population know that you truly care about their health and well- being than to literally save them from undue pain and suffering? I can think of no better.

Thank you for your time and this great effort.

Regards,

Sue Vogan

Published author, radio show host, journalist, book reviewer

3309 Walnut Grove Drive

LaGrange, NC 28551

252-566-9559

testimony

From: Stephen Fox [stephen@santafefineart.com]
Sent: Thursday, February 21, 2008 4:40 PM
To: testimony
Subject: SB2506 to ban aspartame, Testimony By Cori Brackett, Documentary Film Maker/ 2/25 SB 2506 Room 16, !:15

Dear Senator Ige, Senator Fukunaga, Senator Whalen, Senator Menor, and Senator Baker:

As the documentary filmmaker behind the films, Sweet Misery and Sweet Remedy, which both delve deeply into an analysis of aspartame - its history and chemical breakdown - I am writing to commend you for seriously considering the health of Hawaiians by bringing forward a bill to ban aspartame. It is a truly admirable and courageous act, in the spirit of positive community-based change. I, myself, am an aspartame survivor and personally can attest to the physical horrors it can inflict.

In 2002, I was diagnosed with multiple sclerosis and shortly thereafter, was confined to a wheelchair with double vision and slurred speech. As I began to recover, I made the aforementioned aspartame documentaries, needing to alert the public at large and to spare people from my personal traumas. I also wanted to learn as much as I could during this film-making process about the truth or fiction of the dangers of aspartame. Although I did not want to believe that there was a problem with what had been my beverage of choice for twenty years, I found that in aspartame's case at least, where there was smoke, there was fire - a raging inferno, in fact.

The largest tragedy in my own life was thinking that aspartame was not only safe, but good for me. This same story has been repeated by countless aspartame survivors who have contacted me as they regain their health. Many other products have found to be toxic after entering the market place and have subsequently been banned. Look at DDT in pesticides; lead in gasoline; or even Red #1, #2 and #4 for use as food dyes.

Aspartame is a very sneaky, cumulative toxin accompanied by a smiley face.
This is very dangerous. As more knowledge comes to light, it has become your responsibility and high honor to react to this new understanding. I ask you to give your bill a do pass in your Health Committee.

Thank you truly for your time and consideration.

Sincerely,

Cori Brackett
Sound and Fury Productions
2301 East Broadway
Tucson, AZ 85719
(520) 884-4346 (Direct line)
www.sweetremedy.tv .

testimony

From: RWalton193@aol.com
Sent: Saturday, February 23, 2008 6:45 AM
To: testimony
Subject: (no subject)

Dear Senator Ige, Senator Fukunaga, Senator Whalen, Senator Menor, and Senator Baker:

I understand that as part of your deliberation regarding the possibility of banning aspartame use in Hawaii you wish to hear from professionals who have done research on this issue.

My first publication on adverse reactions to this artificial sweetener was a case report: Walton, R.G. Seizure and Mania after High Intake of Aspartame Psychosomatics March 1986 27(3) 218-220. I concluded that my patient's clinical course could best be accounted for by her aspartame intake. One of the reviewers for this paper was Dr. Richard Wurtman, Chairman of the Department of Cognitive Sciences at M.I.T.

Dr. Wurtman contacted me and asked me to keep track of other patients with seizures which I felt could be related to aspartame consumption. I did so and was eventually invited by Dr. Wurtman to present a paper at an M.I.T. conference - "Dietary Phenylalanine and Brain Function" held May 8-10, 1987.

That paper forms the basis of a chapter in a book edited by Dr.Wurtman: Walton, R.G. Chapter 18 The Possible Role of Aspartame in Seizure Induction; WurtmanR.J., Ritter-Walker,E. Dietary Phenylalanine and Brain Function. Boston Birkhauser 1988.

Although at that time I felt aspartame was a "possible" trigger my subsequent clinical experience over the past 20 years has, in my mind transformed that "possibility" into a certainty.

In both of my original papers I suggested that appropriate double blind studies needed to be done. I undertook such a study, which was published in Biological Psychiatry in 1993: Walton, R.G. Hudak,R.Grrene-Waite, R. Adverse Reactions to Aspartame:Double Blind Challenge in Patients from a Vulnerable Population. Biological Psychiatry, 1993;34:13-17.

My hypothesis in this study was that since aspartame led to an increase in norepinephrine precursors, coupled with a simultaneous decrease in serotonin precursors, the potential alteration in central nervous system catecholamine/indoleamine balance would pose a special challenge for patients with a mood disorder.

I was not prepared for the severity of adverse reactions, which led the I.R.B. to appropriately put an early end to the study. Despite the resultant small "n" the findings were still statistically significant, demonstrating that patients with affective disorder were particularly vulnerable to a wide range of adverse reactions.

One unexpected event was that 2 study participants experienced opthalmologic emergencies - one, a 42 year old psychologist with no history of eye problems experienced a retinal detachment and required emergency surgery and a 40 year old nurse for the first time in her life had a conjunctival hemorrhage.

For statistical purposes these events were recorded as occurring during the placebo arm, but there was concern that these problems may have been initiated during the aspartame arm, which they had both just completed. My own belief is that these problems were related to the methanol produced by their aspartame consumption, although this was of course not one of the conclusions of the study.

There will undoubtedly be a great deal of pressure from the aspartame industry, which will point to the hundreds of studies attesting to their product's safety. It is important to bear in mind, however, that virtually all of these studies were funded by the industry, whereas essentially all independently funded studies identify one or more problems.

I pointed this out to Mike Wallace in 1996 when he was interviewing me for a 60 Minutes segment on aspartame. He challenged me on this so I prepared a chart documenting my claim. This chart was included in the 60 Minutes story and is still available on the internet.

In summary, Dr. Green, after studying and researching this question for over 20 years, it is my firm conviction that aspartame lowers seizure threshold, mimics or exacerbates a wide variety of neuropsychiatric disorders, contributes to the incidence of certain cancers, and because of it's impact on the hypothalamic "appestat" plays a significant role in the world-wide epidemic of obesity and type 2 diabetes.

It should definitely be banned.

Thank you for your attention to this most urgent public health issue.
Yours sincerely,

Ralph G. Walton, M.D.
Medical Director, Safe Harbor Behavioral Health
Adjunct Professor of Psychiatry, Lake Erie College of Osteopathic Medicine
Former Professor and Chairman,
Department of Psychiatry,
Northeastern Ohio Universities College of Medicine

David Y. Ige Chairman of Senate Health Committee

16th Senatorial District

Hawaii State Capitol, Room 215

415 South Beretania Street

Honolulu, HI .

Josh Green, M.D.

Hawaii State Capitol, Room 327

415 South Beretania Street

Honolulu, HI 96813

Dear Dr. Green, Chairman Ige, Vice Chair Fukunaga and Honorable Members of the House Health Committee:

I am a board certified physician in both pediatric and Hyperbaric medicine. I was a student of Dr. Arthur Hull Hayes, Jr, the FDA Commissioner responsible fro approving the toxin aspartame to be used in the USA.

I know your time is valuable so in one sentence I will tell you that aspartame has a long well documented legacy showing it is both a neurotoxin and carcinogen that should never, ever have been approved to be fit for human consumption and I strongly encourage you to vote to have this substance banned from your shores.

What follows is a detailed and technical explanation of just how toxic aspartame is. Dr. Green will understand this, I ask the rest of the Health Committee to do the right thing. Please.

Thank you in advance

K Paul Stoller, MD
President International Hyperbaric Medical Association
Medical Director, Hyperbaric Med Ctr New Mexico
Medical Director, Hyperbaric Oxygen Clinic Sacramento
404 Brunn School Rd #D, Santa Fe, NM 87505

In October 1980 the Public Board of Inquiry (PBOI) impaneled by the FDA to evaluate aspartame safety found that the chemical caused an unacceptable level of brain tumors in animal testing. Based on this fact, the PBOI ruled that aspartame should not be added to the food supply.

This ruling culminated 15 years of regulatory ineptitude, chicanery and deception by the FDA and the Searle drug company, aspartameâ€™s discoverer and manufacturer (acquired by Monsanto in 1985), and then started the ball rolling on two additional decades of maneuvering, manipulating and dissembling by FDA, Searle and Monsanto.

In 1965, a Searle scientist licked some of a new ulcer drug from his fingers and discovered the sweet taste of aspartame. Searleâ€™s early tests showed that aspartame produced microscopic holes and tumors in the brains of experimental mice, epileptic seizures in monkeys, and was converted into formaldehyde.

In 1974 the FDA approved aspartame as a dry-foods additive. The renowned brain researcher, John Olney from Washington University in St. Louis reviewed the available data and discovered two studies showing brain tumors in rats and petitioned the FDA for a public hearing. Dr. Olney had already shown that aspartic acid (part of the aspartame molecule) caused holes in the brains of rats. Aspartame also is one part phenylalanine, and and one part methyl (or wood) alcohol.

The FDA prevailed on Searle to refrain from marketing aspartame until after completion of the hearing. In 1975, an FDA Special Commissionerâ€™s Task Force reported serious problems with Searleâ€™s research that was conducted in a manner so flawed as to raise doubts about aspartame safety and create the possibility of serious criminal intent. The FDA asked the U.S. Attorney for Chicago to seek a grand jury review of the monkey seizure study, but he let the statute of limitations run out, then (along with two aides) proceeded to join Searleâ€™s law firm.

In October 1980, the PBOI blocked aspartame marketing until the tumor studies could be explained, and unless the commissioner overruled the board, the matter was closed. In November 1980, Ronald Reagan was elected President and Donald Rumsfeld, president of Searle, joined the Reagan White House. In January 1981 Rumsfeld told a sales meeting that he would call in his chips and get aspartame approved â€“ Dr. Arthur Hull Hayes, Jr. a pharmacologist and Defense Department contract researcher became FDA commissioner and his first decision was to defy FDA advisers and approved aspartame for dry foods. His last decision, before leaving his post because of improprieties was to approve aspartame for soft drinks in 1983. He immediately became senior medical adviser to Searleâ€™s public relations firm for $1000/day. Rumsfeld received a $12 million bonus.

As soon as soft drinks with Nutrasweet began to be consumed, complaints began to arrive at the FDA â€“ dizziness, blurred vision, headaches, and seizures. The complaints were more serious than the FDA has ever received on any food additive. In 1985, the FDA asked the Centers fo Disease Control (CDC) to review the first 650 complaints (there are now tens-of-thousands). CDC found that the symptoms in ~25% of cases stopped and then restarted with discontinuing the use of aspartame and then restarting its use. The day the FDA released the CDC report, which they discounted, Pepsi Cola announced its switch to aspartame with a worldwide media blitz.

At the same time, human brain tumors rose 10% and previously benign tumors turned virulent. An FDAâ€™s deputy commissioner said the data posed no problem; he then became VP of clinical research for Searle.

Four hundred aspartame studies were done between 1985 and 1995. All the studies Searle paid for found no problem, but 100% of the studies paid for be non-industry sources raised questions.

The manifestations of aspartame disease in young children are myriad. They include severe headache, convulsions, unexplained visual loss, rashes, asthma, gastrointestinal problems, obesity, marked weight loss, hypoglycemia, diabetes, addiction (probably largely due to the

methyl alcohol), hyperthyroidism, and a host of neuropsychiatric features. The latter include extreme fatigue, irritability, hyperactivity, depression, antisocial behavior (including suicide), poor school performance, the deterioration of intelligence, and brain tumors.

An average aspartame-sweetened beverage would have a conservative aspartame content of about 555 mg/liter, and therefore, a methanol equivalent of 56 mg/liter (56 ppm). For example, if a 25 kg child consumed on a warm day, after exercising, two-thirds of a two-liter bottle of soft drink sweetened with aspartame, that child would be consuming over 732 mg of aspartame (29 mg/kg). This alone exceeds what the FDA considers the 99+-percentile daily consumption level of aspartame. The child would also absorb over 70mg of methanol from that soft drink. This is almost ten times the Environmental Protection Agency's recommended daily limit of consumption for methanol.

To look at the issue from another perspective, the literature reveals death from consumption of the equivalent of 6 gm of methanol. It would take 200 12 oz. cans of soda to yield the lethal equivalent of 6 gm of methanol. According to FDA regulations, compounds added to foods that are found to cause some adverse health effect at a particular usage level are actually permitted in foods only at much lower levels. The FDA has established these requirements so that an adequate margin of safety exists to protect particularly sensitive people and heavy consumers of the chemical. Section 170.22 of Title 21 of the Code of Federal Regulations mandates that this margin of safety by 100-fold below the "highest no-effect" level. If death has been caused by the methanol equivalent of 200 12 oz. cans of aspartame sweetened soda, one hundredth of that level would be two cans of soda. The relationship of the lethal dose to the "highest no effect" level has tragically not been determined for methanol but assuming very conservatively that the level is one hundreth of the lethal dose, the FDA regulations should have limited consumption to approximately 24 ounces of aspartame-sweetened soft drink per day.

The high ethanol/methanol ratio of alcoholic beverages must have a very significant protective effect given that ethanol antidotes methanol, so donâ€™t let the argument that methanol already exists in alcoholic beverages without untoward effects. This is absurd given that alcoholics have a much higher incidence of cancer and other degenerative diseases, none of which can be attributed to ethanol alone. In aspartame, the methanol is released, once in the body, unfettered by ethanol to be a pure poison.

The FDA allows a lower safety margin only when "evidence is submitted which justifies use of a different safety factor." (21.C.F.R.170.22) No such evidence has been submitted to the FDA for methanol. Thus, not only have the FDA's requirements for acute toxicity not been met, but also, no demonstration of chronic safety has been made. The fact that methyl alcohol appears in other natural food products does not exonerate its presence in aspartame, but increases greatly the danger of chronic toxicity developing by adding another unnatural source of this dangerous cumulative toxin to the food system.

Since the amino acid phenylalanine can be neurotoxic and can affect the synthesis of inhibitory monoamine neurotransmitters the phenylalanine in aspartame can mediate neurologic effects.

Chemicals and compounds that affect physiological systems are classified as drugs by the Food and Drug Administration (FDA), and are subject to considerably more demanding regulatory procedures than food constituents. Moreover, because food additives must be shown to be physiologically inert in order to win initial FDA approval, once they have obtained this approval they are exempted from the requirement, imposed on all drugs, that their safety

be continuously monitored: Companies that manufacture and use approved food additives are not obligated to monitor adverse reactions associated with consumption of their product, nor to submit to the FDA reports of such adverse reactions; they also are not required to carry out further government-mandated research programs to affirm their product's safety.

However, the consumption of a number of food additives can cause physiological effects, which include, for some, modification of the chemical composition and functional activities of the nervous system (1,2). Moreover, in the case of aspartame these neural effects were largely unexplored prior to the compound's addition to the food supply, and were not a factor in calculating the quantities that individuals can safely consume (the ADI, or acceptable daily intake, currently set for aspartame at 50 mg/kg) (3). The effects of aspartame, and of certain other food additives, like caffeine, involve subtler biochemical changes, as well as functional consequences that are demonstrable only in specially treated animals (4) (and possibly, by extrapolation, only in especially vulnerable people).

Although these physiological effects are unrelated to the reason that aspartame was placed in food, they have important health implications given the very large number of people who consume aspartame. If only 1% of the 100,000,000 Americans thought to consume aspartame ever exceed the sweetener's ADI, and if only 1% of this group happen coincidentally to have an underlying disease that makes their brains vulnerable to the effects of an aspartame-induced rise in brain phenylalanine levels, then the number of people who might manifest adverse brain reactions attributable to aspartame would still be about 10,000, a number on the same order as the number of neurologicaly related consumer complaints already registered with the FDA and other federal agencies (5,6).

Doses of aspartame, which are within the range actually consumed by some people can affect the chemical composition of the brain, and thereby contribute to particular CNS sidle effects, including headaches (7), inappropriate behavior responses (8,9), and seizures (10,11).

The major bio-chemical effect of aspartame, in humans, is to raise blood and, presumably, brain phenylalanine levels (12); in contrast, its main effect in rodents is to raise blood (and brain) tyrosine levels (13,14), and tyrosine is often the antidote to phenylalanine's effects on the brain. This species difference makes questionable the extrapolation of much of the rodent literature to humans.

The existence of this major metabolic difference between rodents and people underscores the point that only large-scale human studies could determine whether or not aspartame is risk-free. But aspartame cannot be shown to be risk-free, and its regulatory classification should be changed, for example, to that of a drug.

The consumption of an aspartame-laden food or beverage contributes to the plasma the three natural compounds contained within the aspartame molecule: the amino acids phenylalanine and aspartic acid, and the alcohol methanol (15), possibly as well as various peptides (like B-aspartame or the aspartyl-phenylalanine diketopoperazine that are formed from it spontaneously, on the shelf, or enzymatically, after its consumption).

Plasma phenylalanine levels are not regulated by any known homeostatic mechanism. At any particular time plasma levels simply reflect the amounts of phenylalanine being absorbed from the foods most recently eaten (16,17). Consumption of the ADI aspartame dose is thus able to elevate plasma phenylalanine levels about threefold (18).

Consumption of dietary phenylalanine in the usual way, as a constituent of protein, does not elevate brain phenylalanine levels (19). This is because the protein elevates plasma levels of the other large neutral amino acids (LNAA) (valine, leucine, isoleucine, tryptophan, tyrosine) more than those of phenylalanine. These other amino acids are considerably more abundant than phenylalanine in the protein, and the branched-chain amino acids, unlike phenylalanine, are largely unmetabolized when they pass through the portal circulation (20).

In contrast, consumption of phenylalanine in the form of aspartame, with the other LNAA, that are always present in proteins, elevates plasma phenylalanine levels without elevating those of the other LNAA, this causes marked elevations in the plasma phenylalanine ratio (the ratio of the plasma phenylalanine concentration to the summed concentrations of the other LNAA) (13). Aspartame is the only known phenylalanine-containing food that elevates this ratio.

An elevation in the plasma phenylalanine ratio causes a parallel rise in brain phenylalanine levels, since a single transport macromolecule within the endothelial cells lining the brain's capillaries mediates the uptake of all of the LNAA; this macromolecule is unsaturated at normal plasma LNAA levels; and each of the LNAA's compete for attachment to it, their success depending on their relative affinities for it and their plasma concentration relative to those of its competitor (4,21). The elevation in the plasma phenylalanine ratio also tends to reduce the corresponding ratios for the LNAA, thus decreasing their brain uptakes and tending to lower their brain levels (13). [Aspartame fails to lower brain tyrosine levels in the rat because the rat's liver hydroxylates dietary phenylalanine so rapidly that plasma tyrosine levels rise even more than those of plasma phenylalanine (13,14). However, in humans dietary aspartame probably reduces brain tyrosine uptake.]
If an aspartame-containing beverage is consumed along with, for example, a carbohydrate-rich, protein-poor dessert food, its effects on brain phenylalanine are doubled (13). This is because the insulin secretion elicited by the carbohydrate selectively lowers plasma levels of the branched-chain amino acids (by facilitating their uptake into skeletal muscle), without having much of an effect on plasma phenylalanine; this increases the effect of the aspartame on the plasma phenylalanine ratio (17). A similar doubling may occur if the eater happens to be one of the perhaps 10 million Americans (22) who are, without knowing it, heterozygous for the phenylketonuria (PKU) gene.

Once within brain, neurons producing certain neurotransmitters, such as dopaminergic nigrostriatal cells, the excess phenylalanine can inhibit enzymes (like tyrosine hydroxylase) needed to synthesize the neurotransmitters. Excess circulating phenylalanine can also diminish the production of brain catecholamines and serotonin by competing with their precursor amino acids for transport across the blood-brain barrier. Hence, physiological processes that depend on the sustained release of adequate quantities of these transmitters can be affected.

One such process creates greater sensitivity to seizures (23). In humans, aspartame regardless the dose causes greater increases in plasma (and brain) phenylalanine than tyrosine. (As shown below, sufficiently high aspartame doses, which transiently exceed the liver's capacity to hydroxylate phenylalanine, can also potentiate seizures in rodents, whether these seizures are generated by drugs, electroshock, or inhalation of fluorothyl.)

All of these relationships have now been demonstrated; most recently, the ability of phenylalanine to suppress dopamine release (24)

The ability of aspartame intake to modify seizure susceptibility, their speed of onset, and the amount of convulsant required to produce the seizures among mice given treatments known to be epileptogenic has been looked at (25). In general, animals received various aspartame doses 1 hr before a CD50 dose of the seizure-inducing treatment, or a fixed aspartame dose 1 hr before various doses of the treatment. The number of animals in each treatment group exhibiting seizures in the next 60 min were counted (when the treatment was pentylenetetrazole), or the time passing until a given animal had a seizure (when the treatment was inhaled fluorothyl or electroshock). The aspartame doses used were those shown, in the mice, to cause blood phenylalanine levels to rise by at least as much as blood tyrosine, i.e., doses of 1000 mg/kg or greater.

Aspartame administration produced a dose-dependent increase in seizure frequency among animals subsequently receiving the CD50 dose of pentylenetetrazole (PTZ) (65 mg/kg) . At the 1000 and 2000 mg/kg aspartame doses, 78 and 100% of the animals experienced seizures, compared with 50% in the water-pretreated group. Other mice pretreated with a fixed dose (1000 mg/kg) of aspartame, or with water, and given various doses (50-75 mg/kg) of PTZ an hour later exhibited a significant leftward shift of the PTZ dose response curve (. Enhanced susceptibility to PTZ-induced seizures was also observed among mice pretreated with phenylalanine (in doses equimolar to effective aspartame doses), but not among animals pre-treated with aspartic acid or methanol. Coadministration with aspartame of the LNAA valine, which competes with phenylalanine for passage across the blood-brain barrier (4,21), protected mice from the seizure-promoting effects of the sweetener; in contrast, alanine, an amino acid which does not compete with phenylalanine for brain uptake, failed to attenuate aspartame's effect on PTZ-induced seizures.

The evidence does not indicate that aspartame itself causes seizures; rather it promotes seizures in animals that are already at risk (that is, animals treated with PTZ, fluorothyl, or electroshock). In a similar manner, it is possible that doses of the sweetener that cause a sufficient increase in brain phenylalanine might increase seizure frequency among susceptible humans, or might allow seizures to occur in people who are vulnerable but without prior episodes.

It is unfortunate but perhaps not surprising that questions about aspartame's phenylalanine-mediated neurologic effects arose after the sweetener was added to the food supply. New clinical data and the development of new hypotheses, based on laboratory research, can raise questions about any relatively new compound, even after that compound has passed all of the safety tests required at the time of its approval. What was and continues to be lacking is a process, free of political influence, for monitoring possible adverse reactions after food and drug additives are placed in the market.

Government-mandated safety research does not exist for politically protected chemicals and compounds, such as aspartame.

Conclusion

The initial approval of aspartame by the FDA in I981 â€“ in the face of unequivocal objections from FDAâ€™s own in-house scientists, consultants for the General Accounting Office, and even a Public Board of Inquiry â€“ was an erroneous political and public health crime done for greed alone.

Credible scientific studies, and demographic evidence relating to the contributory role of aspartame sodas and other products in the dramatic increase of obesity, diabetes, attention

deficit disorder, brain tumors and other malignancies in children.

It is no longer just speculation that our Federal health agencies have been co-opted to act as trade organizations for pharmaceutical corporations. This unholy alliance between state and corporation has corrupted these agencies to such an extent that they will need to be rebuilt from the ground up. In the meantime, they need to be recognized for what they are â€" they are not working in the public service, they have no functional oversight, they are feral and are not looking out for the countryâ€™s best interest.

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testimony

From: Lady Carol Ann Davies-Joubert [mision_posible.espanya@yahoo.com]
Sent: Friday, February 22, 2008 6:09 AM
To: testimony
Cc: Betty Martini; Stephen Fox
Subject: ATTN: SEN. DAVID IGE (Ban ASPARTAME Bill - PersonalTestimony)
Attachments: pat358122492; pat2040477266

Dear Senator Ige,
Greetings!
Thank you for sparing me just a few minutes of your valuable time.
Aspartame is a crime that should never have happened. It in a poison that is destroying the health of people all over the world. I am in a wheelchair because of it, with 84% disability.
The Bill SB N° 2506 is a necessary action to save the lives of thousands of Hawaii citizens, especially the children who are the most vulnerable.
Therefore I am writing to commend you for your courage in taking up this issue. I wish you every success with the Aspartame Ban bill.
Attached are 2005 Philippine bill 2147 and 2007 Philippine bill 1731 to ban Aspartame.
God bless you,
Lady C. Ann Davies-Joubert

MY TESTIMONY.
Is this product really that dangerous? I consumed a soda drink for nearly six years which contained aspartame. It was not a 'diet' or 'light' soda and not advertised as such. I consumed just one-and-one-half liters per day. This means I was consuming approximately 227,5mg of aspartame daily; of which 22,75mg was methanol.
This amount of aspartame is well below the daily limit allowed in USA, which –for my weight -- is about 5,500mg aspartame per day. I weigh 110 kilos (just over 200 pounds).
Methanol is poisonous. It converts to formaldehyde in the body. These are facts proven by scientific research, not guesswork. When I began consuming this product I was evaluated at 19% disability because of mild arthritis. In less than six months my disability rating had shot up to 65% and I was in a wheelchair. Any doctor will tell you that arthritis does not deteriorate at such an alarming rate unless there is some outside agent that is causing severe damage to the joints. Spondiloarthrosis is arthritis of the spine, which is the diagnosis I have been given. In under a year my disability had soared to 84% and I was also diagnosed with an enlarged heart.

Other toxic effects that I had from aspartame include:

- Grand Mal Seizures during the night - this has disappeared since I stopped consuming aspartame. (Medically on record)
- Restless Leg Syndrome – this has disappeared since I stopped ingesting aspartame.
- Arrhythmia and loss of pulse - improved since I stopped ingesting aspartame but will reappear if I unknowingly consume anything that contain aspartame. (Medically on record)
- Tachycardia – this has disappeared since I stop ingesting aspartame, but returns if I unknowingly have anything containing aspartame. (Medically on record)
- Extreme fatigue, chronically tired and unable to function normally – this has disappeared since I stopped ingesting aspartame.
- Heavy sedation - I was sleeping between 16 to 20 hours daily, feeling as if I was recovering from general anaesthetic but without fully recovering my senses - this has disappeared since I stopped ingesting aspartame.
- Vision disturbance in the left eye and pain in the optic nerve – this has disappeared since I stopped ingesting aspartame.
- Extreme joint pain including fingers and toes - This has improved since I stopped ingesting aspartame, but not fully; the degenerative progression of the arthritis has slowed down, but there is permanent damage to the joints of the spine. The doctor has prescribed morphine PRN for those days when the pain is severe and does not respond to the usual analgesics prescribed for this. The pain invariably escalates if I unknowingly ingest anything that contains aspartame. (Medically on record)

- Peripheral nerve neuropathy - The distal ends of both feet are completely numb and the pain from damaged nerves is indescribable. This will not improve despite having eliminated aspartame from my diet. (Medically on record)
- Neurological damage – I have been left with a stutter in speaking that I did not have prior to aspartame ingestion. This has improved very slightly since I stopped ingesting aspartame, but will not disappear completely.
- Los of balance – this has disappeared almost completely since I stopped ingesting aspartame.
- Constant dry mouth and eyes – this has disappeared since I stopped ingesting aspartame.
- Personality changes and aggression – this has disappeared since I stopped using any aspartame products. (Medically on record)
- Severe depression – this has disappeared since eliminating aspartame from my diet. (Medically on record)

The withdrawal symptoms from this included:

- severe anxiety;
- cravings similar to drug addiction;
- constant intense thirst;
- disturbed sleep pattern;
- mood swings;
- short temper;
- muscle cramps;
- aggression, and much more.

It was at least 4 to 5 weeks before I began to feel an improvement.

All of this is medically documented. I am now on a disability pension. I have been assessed for a dependency rating; I need a caregiver 24/7. I stopped using aspartame products November 2, 2006.
I sincerely hope that Hawaii legislature will have the courage to do what is right for their constituents. Anything else would be criminal negligence. I will be 60 years old on 5th July this year, Thank you for your time. Yours sincerely,
Lady C. Ann Davies-Joubert

FOURTEENTH CONGRESS OF THE REPUBLIC)
OF THE PHILIPPINES)
First Regular Session)

SENATE
S. No. 1731

Introduced by Senator Miriam Defensor Santiago

EXPLANATORY NOTE

The Constitution, Article XIII, Section 12, provides that:

> The State shall establish and maintain an effective food and drug regulatory system and undertake appropriate health, manpower development and research, responsive to the country's health needs and problems.

Aspartame is, by far, the most dangerous substance on the market that is added to foods. Aspartame is the technical name for the brand names, NutraSweet©, Equal©, Spoonful©, and Equal-Measure©. Aspartame is made up of three chemicals: aspartic acid, phenylalanine, and methanol.

Aspartame accounts for over 75 percent (75%) of the adverse reactions to food additives reported to the US Food and Drug Administration (FDA). Many of these reactions are very serious including seizures and death as recently disclosed in a February 1994 U.S. Department of Health and Human Services report.

A few of the 90 different documented symptoms listed in the report as being caused by aspartame includes headaches/migraines, dizziness, seizures, nausea, numbness, muscle spasms, weight gain, rashes, depression, fatigue, irritability, tachycardia, insomnia, vision problems, hearing loss, heart palpitations, breathing difficulties, anxiety attacks, slurred speech, loss of taste, tinnitus, vertigo, memory loss, and joint pain.

According to researchers and physicians studying the adverse effects of aspartame, the following chronic illness can be trigged or worsened by ingesting of aspartame: brain tumor, multiple sclerosis, epilepsy, chronic fatigue syndrome, Parkinson's disease, Alzheimer's, mental retardation, lymphoma, birth defects fibromyalgia, and diabetes.

This proposed measure seeks to ban and prohibit the use of "aspartame" on food, beverages and drugs and the sale and distribution of artificial sweeteners or sugar substitutes

such as NutraSweet, Equal, Spoonful, Equal-Measure and other brand names with similar contents.

In view of addressing the hazard brought by these artificial sweeteners to our people's health, immediate passage of this measure is earnestly sought.*

MIRIAM DEFENSOR SANTIAGO

* This bill was originally filed during the Thirteenth Congress, Second Regular Session.

FOURTEENTH CONGRESS OF THE REPUBLIC)
OF THE PHILIPPINES)
First Regular Session)

SENATE
S. No. 1731

Introduced by Senator Miriam Defensor Santiago

AN ACT
PROHIBITING THE USE OF "ASPARTAME" ON FOOD, BEVERAGES, AND DRUGS AND FOR OTHER PURPOSES

Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:

SECTION 1. *Short Title.* – This Act shall be known as the "Aspartame Ban Act of 2007."

SECTION 2. *Declaration of Policy.* – It is the policy of the State to establish and maintain an effective food and drug regulatory system and undertake appropriate health manpower development and research, responsive to the country's health needs and problems.

SECTION 3. *Prohibition on the Use of "Aspartame".* – It is hereby declared prohibited to use "aspartame" on food, beverages and drugs such as, but not limited to, instant breakfast, cereals, frozen desert, gelatin dessert, yogurt, juice beverages, milk drinks, shake mixes, cocoa mixes, coffee beverage, soft drinks, tea beverages, instant teas and coffees, tabletop sweeteners, topping mixes, wine coolers, breath mints, sugar-free chewing gum, multivitamins and pharmaceuticals and supplements.

SECTION 4. *Regulatory Power.* – The Bureau of Food and Drugs (BFAD) is hereby mandated to monitor the use of aspartame on selected food, beverages and drugs and to implement the provisions of this Act.

SECTION 5. *Penalties.* – The penalty a fine ranging from One Hundred Thousand Pesos (P100,000.00) to Five Hundred Thousand Pesos (P500,000.00) shall be imposed upon any

individual or officers of a manufacturing or distributing corporation or company who shall violate any of the provisions of this Act.

SECTION 6. *Separability Clause.* – If any provision or part hereof is held invalid or unconstitutional, the remainder of the law or the provision not otherwise affected shall remain valid and subsisting.

SECTION 7. *Repealing Clause.* – Any law, presidential decree or issuance, executive order, letter of instruction, administrative order, rule or regulation contrary to or inconsistent with the provisions of this Act is hereby repealed, modified or amended accordingly.

SECTION 8. *Effectivity Clause.* – This Act shall take effect fifteen (15) days after its publication in at least two (2) newspapers of general circulation.

Approved,

OFFICE OF THE SECRETARY

THIRTEENTH CONGRESS OF THE REPUBLIC)
OF THE PHILIPPINES)
Second Regular Session)

5 OCT 13 P4:

SENATE
S. B. No. 2147 RECEIVED BY:

Introduced by Senator Miriam Defensor Santiago

EXPLANATORY NOTE

The Constitution, Article 13, Section 12 provides that:

> The State shall establish and maintain an effective food and drug regulatory system and undertake appropriate health manpower development and research, responsive to the country's health needs and problems.

Aspartame is one of the most dangerous food additives in the market today. Aspartame, an additive to artificial sweeteners, is made up of three chemicals: aspartic acid, phenylalanine, and methanol.

According to the US Food and Drug Administration, aspartame accounts for over 75 percent of the reported adverse reactions to food additives. A few of the 90 different documented symptoms listed in the report as being caused by aspartame include headaches or migraines, dizziness, seizures, nausea, numbness, muscle spasms, weight gain, rashes, depression, fatigue, irritability, tachycardia, insomnia, vision problems, hearing loss, heart palpitations, breathing difficulties, anxiety attacks, slurred speech, loss of taste, tinnitus, vertigo, memory loss, and joint pain.

According to researchers and physicians studying the adverse effects of aspartame, the following chronic illness can be trigged or worsened by ingesting of aspartame: brain tumor, multiple sclerosis, epilepsy, chronic fatigue syndrome, Parkinson's disease, Alzheimer's disease, mental retardation, lymphoma, birth defect, fibromyalgia, and diabetes.

This bill seeks to ban and prohibit the use of aspartame on food, beverages and drugs.

MIRIAM DEFENSOR SANTIAGO

THE SECRETARY

THIRTEENTH CONGRESS OF THE REPUBLIC)
OF THE PHILIPPINES)
Second Regular Session)

5 OCT 13

SENATE
S. B. No. 2147 RECEIVED BY:

Introduced by Senator Miriam Defensor Santiago

AN ACT
PROHIBITING THE USE OF ASPARTAME ON FOOD, BEVERAGES AND DRUGS

Be it enacted by the Senate and the House of Representatives of the Philippines in Congress assembled:

SECTION 1. *Short Title.* – This Act shall be known as the "Aspartame Ban Act of 2005".

SECTION 2. *Declaration of Policy.* – It is the policy of the State to establish and maintain an effective food and drug regulatory system and undertake appropriate health manpower development and research, responsive to the country's health needs and problems.

SECTION 3. *Prohibition on the Use of Aspartame.* – It is hereby declared prohibited to use aspartame on food, beverages and drugs such as, but not limited to, instant breakfast, cereals, frozen desert, gelatin dessert, yogurt, juice beverages, milk drinks, shake mixes, cocoa mixes, coffee beverage, soft drinks, tea beverages, instant teas and coffees, tabletop sweeteners, topping mixes, wine coolers, breath mints, sugar-free chewing gum, multivitamins, and pharmaceuticals and supplements.

SECTION 4. *Regulatory Power.* – The Bureau of Food and Drugs is hereby mandated to monitor the use of aspartame on selected food, beverages, and drugs and to implement the provisions of this Act.

SECTION 5. *Penalties.* – The penalty of a fine ranging from five hundred thousand pesos (P500,000.00) to five million pesos (P5,000,000.00) shall be imposed upon any individual or officers of a manufacturing or distributing corporation or company who shall violate any of the provisions of this Act.

SECTION 6. *Separability Clause.* – If any provision or part hereof is invalid or unconstitutional, the remainder of the law or the provision not otherwise affected shall remain valid and subsisting.

SECTION 7. *Repealing Clause.* – Any law, presidential decree or issuance, executive order, letter of instruction, administrative order, rule or regulation contrary to or inconsistent with the provisions of this Act is hereby repealed, modified, or amended accordingly.

SECTION 8. *Effectivity Clause.* – This Act shall take effect fifteen (15) days after its publication in two (2) national newspapers of general circulation. The publication shall not be later than seven (7) days after approval hereof.

Approved,

Kanoe Kamanao

From: Leslie Johnson [leslie59@live.com]
Sent: Friday, February 22, 2008 7:58 AM
To: Sen. David Ige
Subject: Testimony, Leslie Johnson, HB 2680, banning aspartame: Please circulate

Re: Senate Bill 2506

Dear Mr. Ige,

>
> Aspartame almost killed me, Its horrible stuff, I
> know its killing, & making
> people chronically sick.
>
> It caused me to have car accidents due to not being quite with it.
>
> I Couldn't think Straight, I had so many health
> problems, Symptoms of M.S.
>
> I am fine now that I make sure I don't use aspartame anymore.
>
> This is just horrible that people thinking the FDA approves this to
> eat & drink, they
>
> are letting people be sick & die & have accidents.
>
> I think this is Just Terrible. But I'm out there educating everyone I can.
>
> Thanks for listening. Sincerely Leslie Johnson
>
>
>
>
>

testimony

From: Stephen Fox [stephen@santafefineart.com]
Sent: Thursday, February 21, 2008 4:22 PM
To: testimony
Subject: stephen fox's testimony, SB 2506 to ban Aspartame, 2/25 1:15 Room 16

Testimony of Stephen Fox on Hawaii's Bill To Ban Aspartame

By Stephen Fox

TESTIMONY FROM STEPHEN FOX OF NEW MEXICO

RE: 2506, to ban aspartame
Honorable David Ige, Chair

Hon. Carol Fukunaga, Vice Chair

Honorable Senator Whalen
Honorable Senator Menor
Honorable Senator Baker

Dear Hawaii Senate Health Committee:

Please give a Do Pass to Senators English and Chun-Oakland's bill to ban aspartame. I have arranged for many victims and many important physicians, including the top physician in the world Dr. H.J. Roberts, to write to you in this regard, as well as one (Senator Gerald Ortiz y Pino) with direct personal observations about the effects of perfidious corporate lobbyists who came to Santa Fe to destroy a prior bill in two different years, 2006 and 2007.

I won't regale you further with the medical harm done by ingesting this poisonous neurotoxin and carcinogen whose approval was forced through the FDA by Donald Rumsfeld as CEO of the patent holder in 1981, G.D. Searle. After watching the DVD Sweet Misery, you know this.

I will only remind you that opposition lobbyists represent industries and corporations that manufacture and add an aspartame that has almost destroyed the Hawaiian agricultural base of growing and refining cane sugar, a profound impact on Hawaii's economy. Yet these same corporations will be complaining about this bill, and telling you blatant lies about how an aspartame is harmless, and that it has been through 200 (industry paid for) tests.

This bill is not only about protecting the health of all Hawaiians, but on an underlying level, perhaps helping to rebuild a major Hawaii industry, the growing and processing of cane sugar.

I think about you all and the decision you will make every time I use packets of turbinado sugar in my tea, grown on Maui and on Kauai. Please ignore the clamor of the lobbyists and the misguided protests of diabetics, the last people in the world who should be ingesting a chemical metabolized as methanol and formaldehyde. Please give this bill a do pass and let the FDA, the corporations, and the entire world that your committee takes seriously the medical health of all Hawaiians.

I respectfully thank you,

Stephen Fox, Managing Editor, Santa Fe Sun News

Founder, New Millennium Fine Art 217 W. Water St., Santa Fe, NM 87501

testimony

From: Stephen Fox [stephen@santafefineart.com]
Sent: Thursday, February 21, 2008 4:18 PM
To: testimony
Subject: Dr. James Granger's testimony, Hawaii Senate Health Committee to ban aspartame, SB2506, 2/25, 1:15,Rm 16

Dr. James R. Granger III, MD

P.O.
Box 681

Grovetown,
GA 30813

Feb
10 2008

Honorable David Ige, Hon. Carol Fukunaga, Hon. Sen. Baker, Senator Menor, and Senator Whalen:

Please Copy as Committee handout

Dear Committee Members:

I am a physician and truly disturbed by the continued availability of Aspartame in our food supply. As a resident physician I developed tremors in my dominant hand (right). These tremors affected my surgical performance to the point of having one of my professors inquire as to whether or not I had an alcohol problem. I can assure you that I do not, nor have I ever had a substance abuse problem of any kind.

My tremors persisted beyond my postgraduate training. I then had friends comment on noticing my hand shaking at rest outside of a clinical environment. After removing Aspartame from my diet, the tremors have been absent for over two years.

I have researched the issue and found that there is a plethora of scientific evidence to substantiate the claim that Aspartame should have never been allowed to enter our food supply.

Several facts need to be noted:
1) The FDA commissioner overruled his advisory board in 1983 to allow Aspartame into our food supply.
2) There is NO nutritional value to Aspartame.
3) The symptoms of Attention Deficit Disorder (ADD) are contained within the list of complaints symptoms presented to the FDA regarding Aspartame
4) The incidence/diagnosis of Obesity, malignant tumors, ADD, anxiety and other diagnosis have all increased in epidemic proportions since the 1983 introduction of Aspartame into the food supply.
5) Many of the original studies were manipulated and poorly performed. Note the summary below (excerpt from www.wnho.net posted 3/12/2004):

A few of the relevant findings summarized from various documents describing the FDA Task Force Report:
* "Excising masses (tumors) from live animals, in some cases without histologic examination of the masses, in others without reporting them to the FDA." (Schmidt 1976c, page 4 of US Senate 1976b) Searle's representatives, when caught and questioned about these actions, stated that "these masses were in the head and neck

areas and prevented the animals from feeding." (Buzzard 1976a) "Failure to report to the FDA all internal tumors present in the experimental rats, e.g., polyps in the uterus, ovary neoplasms as well as other lesions." (Gross 1987a, page 8).

* G.D. Searle "stored animal tissues in formaldehyde for so long that they deteriorated." (Gordon 1987, page 496 of US Senate 1987; US Schmidt 1976c, page 25, 27 of US Senate 1976b)

* "Instead of performing autopsies on rhesus monkeys that suffered seizures after being fed aspartame, the company had financed a new monkey seizure study with a different methodology that showed no problems." (Gordon 1987, page 496 of US Senate 1987)

* "Reporting animals as unavailable for necropsy when, in fact, records indicate that the animals were available but Searle choose not to purchase them." (Schmidt 1976c, page 5 of US Senate 1976b)

* Animals which had died were sometimes recorded as being alive and vice versa. "These include approximately 20 instances of animals reported as dead and then reported as having vital signs normal again at subsequent observation periods." (Gross 1985, page S10835)

* "Selecting statistical procedures which used a total number of animals as the denominator when only a portion of the animals were examined, thus reducing the significance of adverse effects." (Schmidt 1976c, page 4 of US Senate 1976b)

* G.D. Searle told the FDA that 12 lots of DKP were manufactured and tested in one study, yet only seven batches were actually made. (Gross 1985, page S10835)

* "Significant deviations from the protocols of several studies were noted which may have compromised the value of these studies . . . In at least one study, the Aspartame 52 weeks monkey study, the protocol was written after the study had been initiated." (Gross 1985, page S10835)

* "It is significant to note that the Searle employee responsible for reviewing most of the reproduction studies had only one year of prior experience, working on population dynamics of cotton tail rabbits while employed by Illinois Wildlife Service. In order to prepare him for this title of 'Senior Research Assistant in Teratology' (fetal damage) Searle bought him books to read on the subject and also sent him to a meeting of the Teratology Society. This qualified him to submit 18 of the initial tests to the FDA, in addition to training an assistant and 2 technicians. He certainly must have kept them busy because Searle claimed that 329 teratology examinations were conducted in just 2 days. He estimated that he himself examined about 30 fetuses a day, but officials for the Center for Food and Applied Nutrition could never determine how that was possible."

* "In each study investigated, poor practices, inaccuracies, and discrepancies were noted in the antemortem phases which could compromise the study."

* "Presenting information to FDA in a manner likely to obscure problems, such as editing the report of a consulting pathologist . . . Reporting one pathology report while failing to submit, or make reference to another usually more adverse pathology report on the same slide." (Schmidt 1976c, page 4-5 of US Senate 1976b)

* Animals were not removed from the room during the twice per month exterminator sprayings. (Gross 1985, page S10836 of Congressional Record 1985b)

* Often the substance being tested which was given to the animals was not analyzed or tested for homogeneity. "No records were found to indicate that any treatment mixtures used in the studies were ever tested or assayed for pesticide content . . . Running inventory records for either treatment mixtures or the test compounds used in treatment mixtures are not maintained."

* In the Aspartame (DKP) 115 week rat study the written observations of the pathology report was changed by the supervising pathologist, Dr. Rudolph Stejskal even though he was not physically present during the autopsies and could not have verified the observations of the pathologist who did perform the autopsies. The pathologist who did perform some of the autopsies had no formal training for such procedures.

* "Contrary to protocol, slides were not prepared of this [unusual lesions from the Aspartame (DKP) study) tissue for microscopic examinations . . . ."

* "In the Aspartame 46 weeks hamster study, blood samples reported in the submission to FDA as 26 week values (for certain specified animals) were found by our investigators as being, in fact, values for different animals which were bled at the 38th week. Many of the animals for which these values were reported (to the FDA) were dead at the 38th week." (Gross 1985, page S10838)

"It is apparent from the report, that the Appendix portion contains all the individual (animal) values of clinical lab data available from the raw data file. A selected portion of these values appears to have been used in computing group means (which were reported to the FDA). It is not clear what criteria may have been used for selecting a portion of the data or for deleting the others in computing the means (reported to the FDA)." (Gross 1985, page S10838 of Congressional Record 1985b)

* "Searle technical personnel failed to adhere to protocols, make accurate observations, sign and date records, and accurately administer the product under test and proper lab procedures."

* [There were] "clerical or arithmetic errors which resulted in reports of fewer tumors."

* [G.D. Searle] "delayed the reporting of alarming findings." FDA Toxicologist and Task Force member, Dr. Andrian Gross stated: "They [G.D. Searle] lied and they didn't submit the real nature of their observations because had they done that it is more than likely that a great number of these studies would have been rejected simply for adequacy. What Searle did, they took great pains to camouflage these shortcomings of the study.

In conclusion: The economic impact of banning Aspartame is outweighed infinitely by the invaluable improvement in the health of your constituents. I ask that you protect and serve your constituents, yourselves and your families by banning Aspartame from your jurisdiction. The leadership you would exemplify would set a much overdue president and positive impact it can/will have on other jurisdictions is incalculable.

Sincerely,

James R. Granger, III, MD

Please Copy and Circulate for Monday

To Senator David Ige and Senate Health Committee: Re: SB 2506 to ban Aspartame

Dear Senator Ige:

Thank you for scheduling this committee meeting Monday. Here is why aspartame (NutraSweet/Equal, etc.) is so deadly and unfit for human consumption:

1. It's a multipotential carcinogen. The FDA knew it over two decades ago and both FDA toxicologists testified during congressional hearings. Two of the most impeccable studies ever done are the Ramazzini Studies in Italy, peer reviewed by 7 world experts, confirming aspartame as a multipotential carcinogen, even in small doses. Here are the results in brief:

The first ERF study (2005) was conducted on 1800 Sprague-Dawley rats (100-150/per sex/per group). In order to simulate daily human intake, aspartame was added to the standard rat diet in quantities of 5000, 2500, 100, 500, 20, 4, and 0 mg/Kg of body weight. Treatment of the animals began at 8 weeks of age and continued until spontaneous death. The results show that APM causes a statistically significant, dose-related increase of lymphomas/leukemias and malignant tumors of the renal pelvis in females and malignant tumors of peripheral nerves in males. These results demonstrate for the first time that APM is a carcinogenic agent, capable of inducing malignancies at various dose levels, including those lower than the current acceptable daily intake (ADI) for humans (50 mg/kg of body weight in the US, 40 mg/kg of body weight in the EU).

The second ERF study (2007) was conducted on 400 Sprague-Dawley rats (70-95/per sex/per group). In order to simulate daily human intake, aspartame was added to the standard rat diet in quantities of 100, 20, and 0 mg/Kg of body weight. Treatment of the animals began on the 12th day of fetal life until natural death. The results of the second study show an increased incidence of lymphomas/leukemias in female rats with respect to the first study. Moreover, the study shows that when lifespan exposure to APM begins during fetal life, the age at which lymphomas/leukemias develop in females is anticipated. For the first time, a statistically significant increase in mammary cancers in females was also observed in the second study. The results of this transplacental carcinogenicity bioassay not only confirm, but also reinforce the first experimental demonstration of APMs multipotential carcinogenicity.

The Delaney Amendment makes it illegal to put anything in food that causes cancer. Here is testimony in congress:

On August 1, 1985 the FDA's own toxicologist, Dr. Adrian Gross, told Congress at least one of Searle's studies "has established beyond ANY REASONABLE DOUBT that aspartame is capable of inducing brain tumors in experimental animals and that this predisposition of it is of extremely high significance. ... In view of these indications that the cancer causing potential of aspartame is a matter that had been established WAY BEYOND ANY REASONABLE DOUBT, one can ask: What is the reason for the apparent refusal by the FDA to invoke for this food additive the so-called Delaney Amendment to the Food, Drug and Cosmetic Act?"

The Delaney Amendment makes it illegal to allow any residues of cancer causing chemicals in foods. In his concluding testimony Gross asked, "Given the cancer causing potential of aspartame how would the FDA justify its position that it views a certain amount of aspartame as constituting an allowable daily intake or 'safe' level of it? Is that position in effect not equivalent to setting a 'tolerance' for this food additive and thus a violation of that law? And if the FDA itself elects to violate the law, who is left to protect the health of the public?" Congressional Record SID835:131 (August 1, 1985)

In original studies aspartame triggered not only brain tumors but mammary, uterine, ovarian, testicular, pancreatic and thyroid tumors.

2. The public at risk. As FDA toxicologist said "who is left to protect the health of the public". This is the reason for Mission Possible International, in 50 states and 38 nations, a non-profit, global volunteer force warning the world off aspartame.

Consider some of the problems such as precipitating diabetes, simulates and aggravating diabetic retinopathy and neuropathy, causing diabetics to go into convulsions and even interacting with insulin. It also makes you crave carbohydrates so you gain weight. So we have an epidemic of diabetes and obesity. But if cancer is not grave enough aspartame also triggers an irregular heart rhythm, interacts with cardiac medication, damages the cardiac conduction system and causes sudden death. Here is Dr. H. J. Roberts article on it: http://www.wnho.net/aspartame_and_arrhythmias.htm Neurosurgeon Russell Blaylock, M.D., wrote this Athlete Alert on Aspartame Sudden Cardiac Death: http://www.wnho.net/aspartame_msg_scd.htm A new study just recently linked diet cola to heart disease and diabetes: http://www.rense.com/general80/meat.htm

Cancer and sudden death is about as bad as you can get but aspartame also embalms living tissue and damages DNA. I'm faxing Dr. Alemany's letter he originally sent to the House and wants you to have as well. He did the Trocho

Study which proves aspartame embalms from the formaldehyde converted from the free methyl alcohol. I will fax that study.

Aspartame destroys the family. It causes male sexual dysfunction and ruins female response. It's an endocrine disrupting drug which changes the menses and causes infertility. If the woman gets off of it and gets pregnant and uses it again it's an abortifacient and teratogen causing birth defects and mental retardation. It also depletes serotonin triggering psychiatric and behavioral problems and interacting with all anti-depressants. http://www.mpwhi.com/aspartame_and_psychiatric_disorders.htm It's a seizure triggering drug and interacts with all anti-seizure medication. So no drug is safe in this country as long as someone is consuming aspartame.

How much worse can it get? The free methyl alcohol blinds. The medical texts, Aspartame Disease: An Ignored Epidemic, www.sunsentpress.com by H. J. Roberts, M.D., (Rep Josh Green, M.D. has a copy, 1000 pages) and Excitotoxins: The Taste that Kills, www.russellblaylockmd.com go into endless neurodegenerative diseases aspartame triggers, and the FDA itself lists 92 documented symptoms from 4 types of seizures to coma and death.

Why would anyone want on the market a deadly chemical poison? It's not an additive as they must be inert by law or non-reactive. Aspartame is an addictive excitoneurotoxic carcinogenic drug once listed with the pentagon in an inventory of prospective biochemical warfare weapons submitted to Congress. http://www.mpwhi.com/ecologist_september_2005.pdf Several aspartame detox clinics are in the US and Essence Center in Asheville, North Carolina takes the addiction victims. We do have an Aspartame Information List that acts as a support group on www.mpwhi.com and Dr. Russell Blaylock has written a detox program to help.

So if you were asked if something should be approved for human use that destroys the unborn and damages children, blinds, embalms and causes sudden death you would no. You have an opportunity now to ban this poison. It is also against the law because its adulterated and therefore violates Interstate Commerce laws.

3. The opposition and the lobbyists. They will try to tell you this is needed for diabetics when, in fact, it precipitates the disease and the methyl alcohol is causing them to lose limbs. http://www.wnho.net/letter_to_senator_goyp_concerning_aspartame.htm

The lobbyists will tell you aspartame is made up of the building blocks of life. What they do not tell you is that there are some amino acids that cannot be isolated. The aspartic acid in aspartame is an excitotoxin or product that stimulates the neurons of the brain to death causing brain damage. You will

see Dr. John Olney's original study on aspartic acid, 40% of aspartame in this Report For Schools: http://www.mpwhi.com/fda_petition1.doc The phenylalanine, 50% of the molecule as an isolate is a neurotoxin, floods the brain, lowers the seizure threshold and depletes serotonin. Also they are bound by a methyl ester, which immediately becomes methanol and converts to formaldehyde and formic acid (ant sting poison). They will try to tell you there is more methanol in fruits and vegetables but what they don't tell you is that in fruits and vegetables the methanol binds to pectin and takes it safely out of your body. Also, ethanol is the antidote for methanol toxicity which is in fruits and vegetables but not in aspartame.

How do they make this poison. This is what Dr. Bill Deagle said who told me he has seen the vats of toxic sludge:

Paragraph on Genetically Engineered Aspartame producing bacterial technology in Aiken, S.C.:

"Most people when asked how Aspartame is made do not have the first step of understanding. While an E.R. doctor and primary care physician in Augusta, GA in 1987 and 1988, I was told a number of interesting facts about the adjacent Aspartame factory. Bacteria with genes inserted generate a sludge which is centrifuged to remove the aspartame and many hundreds of contaminant organic and amino acids are present. We were told not to report illness or worker's compensation issues for fear of being fired by the hospital, now the Augusta Regional Medical Center. Many of their employees presented with psychiatric, neuropathy conditions, chronic fatigue and organic cases of loss of cognitive function. This powder from the dried sludge was then transported for packaging in factories elsewhere in the US, before sale as Equal and now the myriad of names of this neurotoxin." Bill Deagle, M.D., 888 212 8871

Here is the propaganda answered with medical references that are given by lobbyists and front groups like Calorie Control Council: http://www.dorway.com/offasprt.html They are really in violation of Title 18, Section 1001 for misleading the public with full knowledge.

One of the most despicable problems we have is that industry funds the professional organizations like the American Diabetes Assn, and American Dietetics Assn, etc. They use the above propaganda even with full knowledge. In 2004 the American Diabetes Assn had Racketeering charges filed against them for pushing aspartame, and even though they got out of it be assured they know they are sacrificing diabetics.

They will also get into economics. When the Ramazzini Study was done and made world news the New York Times asked the FDA why they didn't ban it. It's hard to believe their answer is because of the economics to the manufacturer. So its okay to poison the public but just don't disturb the manufacturer's checkbook. So if you're wondering why aspartame is still on the market its for the same reason as tobacco, profit, addiction and greed.

4. How did it get approved? It was approved not by science but by the political chicanery of Donald Rumsfeld who was CEO of Searle at the time. The FDA not only did not want to approve it but tried to have the manufacturers indicted for fraud. Unfortunately both US Prosecutors hired on with the defense team and the statute of limitations expired. See the DVD Sweet Misery: A Poisoned World and you will hear James Turner, Atty, explain exactly how Rumsfeld got it on the market. Here is a clip from that film: http://www.soundandfury.tv/pages/rumsfeld2.html The FDA revoked the petition for approval: http://www.mpwhi.com/fda_petition1.doc This DVD supplied to you gives you an opportunity to have the world experts testify on the toxicity of aspartame, just as if they were standing in front of you.

I pray you will ban this deadly chemical poison from the beautiful islands of Hawaii. People will be waking well from all types of symptoms and diseases once they are off this toxin, if its not too late. When thousands and thousands of booklets on aspartame were given out in Atlanta some years ago, within 60 days some blind people could see again, those crippled with fibromyalgia could walk again and even MS victims walked out of wheelchairs. Don't you want to see that in Hawaii. All you have to do is give it a "do pass" and free the people of the horrible effects of this poison now called "Rumsfeld's Plague"!

Respectfully,
Dr. Betty Martini, D.Hum, Founder
Mission Possible International
9270 River Club Parkway
Duluth, Georgia 30097
770 242-2599
www.mpwhi.com, www.dorway.com and www.wnho.net
Aspartame Toxicity Center, www.holisticmed.com/aspartame

For Senator Ige at Dr. Alemany's request
SB 2506 - Monday

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Prof. Dr. Marià Alemany

Grup de Recerca Nitrogen-Obesitat

Barcelona February 12, 2008

The President
Hawaii House Committee on Health
Honolulu, Hawaii
United States of America

Sir/Madam,

I am aware that your Committee is prepared to discuss the pertinence of banning the use of aspartame in products for human use, from drugs to foods. Since I am one of the few scientists that have a direct working knowledge of the metabolism effects of this drug, I feel that it is mu duty to give you the reasons why I think that this compound should not be allowed for human use.

In order to test a hypothesis repeatedly maintained without experimental proof that the incorporation of carbon from labeled aspartame found in proteins of experimental animals was due to normal metabolic incorporation of this carbon into protein amino acids through the 1C pathways, we devised a simple set of experiments in which we fed radioactively labeled aspartame to groups of rats. We found (and published in a peer-reviewed Journal, Life Sciences) that the label specifically linked to the methanol moiety of aspartame found its way into both protein, RNA, and DNA. We also proved beyond doubt that this incorporation was not due to its incorporation to normal amino acids (methionine) or nucleic acid components (pyrimidines), but was the consequence of the formation of adducts of formaldehyde. This effect was observed in most tissues, including the retina, liver and brain, and was observed with fairly low doses of the drug, an effect potentiated by repeated dosing.

The danger associated with formaldehyde toxicity, as that demonstrated by us in aspartame-treated rats is mainly associated to the formation of adducts with DNA that result in mutations, the base for cancer and cell reproduction errors. In addition, proteins were affected, with the consequent loss of function and metabolic derangement. The publication of this paper resulted in a serious attack, in a paper published shortly afterwards in the same Journal, by a researcher closely related to the company producing this compound in which my integrity and that of my co-authors was challenged as were our results (without any experiment done, and no actual discussion of our results, methodology or conclusions). The pressure we felt (and an unexplained drop in our financing) helped us to abandon further studies on aspartame. Nevertheless, our results stand and have not been proved wrong, in fact they are the only study as far as we know that proves the direct interaction of aspartame-derived carbon in the formation of DNA adducts in vivo. This report, in line with all the studies done using labeled aspartame, was ignored by the European Union Committee on Food Safety and a number of other food control Agencies at the prompting of industry-related lobbies.

I am very sorry that the health of so many people depends on a product that should not be available for human consumption, that is harmful and which long-time effects have not been established nor even investigated. I am suggesting that a preventive ban be established on its use (or at least include an explanatory label in all products that contain aspartame in line with the notices on tobacco use), but also that a complete, independent and unbiased study be carried out to prove whether the ill-effects observed at the molecular level are translated into serious health harm as many of us, basic scientists fear.

Please, take this opportunity to help people first to know, second to decide and third to take them out of harm's way.

Thank you very much for allowing me to give my testimony. Please, let me know if you require further information or more detailed explanations justifying the position I have just outlined.

Sincerely,

Marià Alemany PhD
Professor of Nutrition and Food Science

Her study attached

For Senator Ige — SB 2506 Monday

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FORMALDEHYDE DERIVED FROM DIETARY ASPARTAME BINDS TO TISSUE COMPONENTS *IN VIVO*

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(Received in final form May 13, 1998)

Summary

Adult male rats were given an oral dose of 10 mg/kg aspartame ^{14}C-labelled in the methanol carbon. At timed intervals of up to 6 hours, the radioactivity in plasma and several organs was investigated. Most of the radioactivity found (>98 % in plasma, >75 % in liver) was bound to protein. Label present in liver, plasma and kidney was in the range of 1-2 % of total radioactivity administered per g or mL, changing little with time. Other organs (brown and white adipose tissues, muscle, brain, cornea and retina) contained levels of label in the range of 1/12 to 1/10th of that of liver. In all, the rat retained, 6 hours after administration about 5 % of the label, half of it in the liver. The specific radioactivity of tissue protein, RNA and DNA was quite uniform. The protein label was concentrated in amino acids, different from methionine, and largely coincident with the result of protein exposure to labelled formaldehyde. DNA radioactivity was essentially in a single different adduct base, different from the normal bases present in DNA. The nature of the tissue label accumulated was, thus, a direct consequence of formaldehyde binding to tissue structures. The administration of labelled aspartame to a group of cirrhotic rats resulted in comparable label retention by tissue components, which suggests that liver function (or its defect) has little effect on formaldehyde formation from aspartame and binding to biological components. The chronic treatment of a series of rats with 200 mg/kg of non-labelled aspartame during 10 days resulted in the accumulation of even more label when given the radioactive bolus, suggesting that the amount of formaldehyde adducts coming from aspartame in tissue proteins and nucleic acids may be cumulative. It is concluded that aspartame consumption may constitute a hazard because of its contribution to the formation of formaldehyde adducts.

Key Words: aspartame, aspartame toxicity, formaldehyde, methanol

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Aspartame is one of the most widely used artificial sweeteners. Its peptide nature: aspartyl-phenylalanine methyl-ester facilitates its intestinal hydrolysis and the absorption (1-3) of innocuous amino acids together with small amounts of free methanol, far away from the lower limits of toxicity for that compound (4). The use of large amounts of aspartame in the diet, however, has been claimed to be the cause of a number of ailments, like headaches (5) and other symptoms (6-7), which are difficult to explain (8) from its known composition and the easy blending of its building components in the overall host metabolism. A number of studies have linked aspartame with neurologic pathologies, but most of the results yielded negative or inconclusive correlations (9-16). The acute toxicity of aspartame is believed to be low (17), which has promoted a wide distribution of the product as a potent hypocaloric and safe substitute of sugar (18-19).

Methanol is primarily oxidized in several tissues to formaldehyde and formic acid (20-21), the latter being considered the main metabolite responsible for the deleterious effects of acute methanol intoxication in man (22), but also in experimental animals (23), in spite of the marked resistance of the rat to formate (24-25). The enzymes involved in methanol metabolism are alcohol dehydrogenase (EC 1.1.1.1) and aldehyde dehydrogenase (EC 1.2.1.3), as well as the microsomal oxidase pathway (26). Acute methanol intoxication may produce blindness and hepatic loss of function (27-28), since the retina, cornea and liver contain the highest alcohol dehydrogenase activity (29-30). These tissues are, thus, where one can expect, eventually, the largest accumulation of their byproducts: formaldehyde and formate, in the event of intoxication. It may be assumed that liver functional failure due to cirrhosis could result in the loss of its role as barrier to intestinal methanol, and thus, the effects of methanol intoxication on other tissues (i.e. the retina) would be more marked. The cirrhotic rat may be, then, used as a model of acute or chronic methanol toxicity.

Formaldehyde is a highly reactive small molecule which strongly binds to proteins (31) and nucleic acids (32) forming adducts which are difficult to eliminate through the normal metabolism pathways. As a result, formaldehyde induces severe functional alterations (33), including the development of cancer (34). The small amounts of formaldehyde which can be potentially produced from dietary use of aspartame have been often overlooked in its potential toxicity precisely because of the limited amount eventually produced. However, the administration of labelled aspartame to experimental animals results in the incorporation of a significant proportion of the label to proteins (35). The accumulation of label has been postulated to be the consequence of label drift into amino acids (essentially in the methionine methyl group) through the one-carbon pool (35). This aspect has not been, however, proved nor further investigated.

We have intended here to determine the extent of conversion of aspartame methanol to formaldehyde and its eventual effect on the overall physiologic function of the rat. In addition we have probed whether the aspartame methanol carbon presence in tissue components is due to the eventual drift of label into methionine and nucleic acid components through the one-carbon pool, or is the consequence of a direct reaction with free formaldehyde forming stable adducts.

Materials and Methods

Aspartame. Aspartame labelled (^{14}C) in the methanol carbon was custom-prepared by Amersham (Amersham, uk). The product had a specific activity of 433 MBq/mmol, and a chromatographic purity >98%. The standard dose given orally to the rats was 4.5 Mbq per kg of rat weight, always supplementing unlabelled aspartame (Sigma, St Louis, mo usa) to give a specific activity of 55 Mbq/mmol.

Acute and chronic administration of aspartame to normal rats. Sixteen week-old healthy adult male Wistar rats, weighing initially 380-460 g, were used. The rats were housed in collective cages in a controlled environment (21-22°C; 70-75 % relative humidity; lights on from 08:00 to 20:00),

and were fed a standard chow pellet (B&K, Sant Vicent dels Horts, Spain) and tap water ad libitum.

Two groups of rats were selected. The first group NC (Normal-Chronic, N=5) received a daily oral gavage of 0.68 mmol per kg of rat weight (200 mg per kg) of a water suspension (2.5 mL/kg) of non-radioactive aspartame (Sigma). This treatment was continued for 10 days. On day 11, the rats were administered a gavage of 4.5 Mbq per kg of rat weight of labelled aspartame in 68 µmol of cold aspartame per kg, in the same volume of the standard gavage. The second group NA (Normal-Acute, N=12) was given a single dose of 4.5 Mbq per kg of rat weight of labelled aspartame in 68 µmol of cold aspartame per kg of rat weight. Prior to the administration of the last (or only) dose, blood was extracted from the tail vein and used for the measurement of biochemical parameters using a Spotchem dry strip (panel 1 and 2) analysis system (Menarini, Milano, Italy).

The rats chronically treated (NC group) were killed by decapitation 6 hours after the administration of the labelled aspartame gavage. The rats in the NA group were killed by decapitation at 15 or 30 min and at 1, 2, 6 or 24 hours after the administration of the final labelled aspartame load. All animals were dissected, and samples of blood plasma (heparinized), liver, kidneys, brain, cornea, retina, hind leg striated muscle, epididymal fat pads and interscapular brown adipose tissue were cut, weighed (blotted when necessary), and frozen in liquid nitrogen. The samples were preserved at -20°C until processed.

Tissue samples were homogenized in water: methanol (4:1) in order to limit the losses of free methanol, using an all-glass Tenbroek homogenizer. Aliquots of the homogenates were immediately counted for radioactivity using a water-miscible scintillation cocktail (Ecolite, from ICN, Costa Mesa, ca usa). Plasma samples were counted directly after mixing with the scintillation cocktail. In all cases, two countings, 24-hours apart were performed. In all cases we obtained the same countings; there were no samples showing a significant loss of radioactivity (purportedly due to the eventual evaporation of methanol to the head space of the vial). Thus it was assumed that no significant amounts of labelled methanol were present in the final homogenates. Aliquots of the homogenates were precipitated with trifluoroacetic acid to remove the protein from supernatants, and the two fractions were then counted separately.

Acute and chronic administration of aspartame to liver-damaged rats Six week-old healthy adult male Wistar rats weighing initially 100-120 g were used. The rats were housed and fed under the same conditions described above for the controls. The rats were made cirrhotic by means of three i.p. injections per week of carbon tetrachloride diluted 1:1 with corn oil (36). The rats received 0.4 mL injections during the first 2 weeks, then 0.6 mL until week 6 and finally 0.8 mL until week 10, when the period of treatment was considered finished, when the rats weighed 340-380 g.

Two groups of liver-damaged rats were selected. The first group CC (Cirrhotic-Chronic, N=5) received a daily oral gavage of non-radioactive aspartame for 10 days, and on day 11 they received 4.5 Mbq/kg of labelled aspartame as in the NC group. The second group CA (Cirrhotic-Acute, N=11) was given a single dose of 4.5 Mbq/kg of labelled aspartame in 68 µmol of cold aspartame per kg as in the NA group. Tail vein blood was sampled from these animals, and its plasma stored frozen; this was later used to measure biochemical parameters as in group NA.

The CC chronically treated rats were killed by decapitation -as in the control series- 6 hours after the administration of the labelled oral bolus of aspartame, and those in the CA group were killed at 15 or 30 min and at 1, 2, 6 or 24 hours after receiving the labelled aspartame load. Samples of blood plasma and tissues were weighed, frozen and stored at -20°C until processed. Some samples of liver were preserved in 4 % formaldehyde and later used for the preparation of stained tissue sections in order to determine the degree of hepatic alteration (37). Blood and tissue samples were processed as described for normal rats.

Statistical comparison between means was determined with standard two-way anova programs, as well as with the Student's t test.

Nucleic acids analysis. Two additional adult rats were treated as in group NC, but they received the gavage for only three days. The last gavage contained 37 Mbq of radioactive aspartame. After killing, blood plasma and liver samples were obtained and frozen. Liver tissue was used for the extraction and purification of total RNA and DNA using the Tripure (Boehringer Mannheim, Germany) isolation reagents system. These preparations yielded pure fractions of DNA, RNA and protein. Nucleic acids content was determined by uv light absorption at 260/280 nm (38), and protein with the Bradford method (39). The radioactivity of these fractions was measured and used for the estimation of their specific radioactivity. The pooled DNA samples of the two rats used were hydrolysed with 88 % formic acid at 170°C in a sealed glass ampoule (40), and the corresponding constituting bases separated through thin layer chromatography on 0.1 mm thick cellulose plates (5716 Merck, Darmstadt, Germany), run against standards of ^{14}C-labelled adenosine, guanine and thymine (all from ICN, Costa Mesa, ca usa) containing their cold counterparts (from Sigma, St Louis, mo usa). The mobile phases used were isopropanol: 25% ammonium hydroxide (4:1 by volume) and butanol: acetic acid: water (4:1:1 by volume) (41). Spot radioactivity was measured by exposure of the chromatograms with the Bio-Rad Molecular Imaging Screen-BI (Bio-Rad, Hercules, ca usa) for several days. The plates were later read with a Bio-Rad Molecular Imager System GS-525 two-dimensional array radioactivity counter; this instrument provided a printed "photographic plate" of the bidimensional distribution of radioactivity in the chromatogram. Labelled standards of DNA bases were used to determine whether the hydrolysed sample presented any radioactivity in their spots. Cytosine was not included as standard since no carbon from 1C pool participates in its structure through the whole process of pyrimidine synthesis.

The DNA digest from the liver of rats exposed to labelled aspartame was also analysed through HPLC, using a Kontron (Milano, Italy) HPLC fitted on line with a diode array detector 440 (Kontron) and an eluate scintillation detector LB 507 A (Beckman, Fullerton ca usa). The instrument was run with the Data System 450-MT2/DAD (Kontron) software. We used a sox cationic interchange column (Kontron) (250x4 mm, 10 µm), maintained at 25 °C, and total flow was 0.8 mL/min. An isocratic gradient of 100 % 10 mM ammonium phosphate buffer pH 5.56 was used. The scintillation detector used a cocktail ultima-flo M (Packard, Meriden il usa) with a mixture ratio of 3:1. A series of standards of adenine, thymine and guanine were run under the same conditions. In all cases the radioactivity in the fractions was recorded.

Protein analysis. The rats used for nucleic acid analysis provided enough plasma samples for protein analysis; plasma proteins were selected because they could not be contaminated with nucleic acids. The plasma proteins (0.100 mL aliquots) were precipitated with 10% trifluoroacetic acid. Aliquots of the precipitated proteins were then hydrolysed for 48 h at 110°C in 6N HCl in Teflon-sealed tubes with occasional shaking (42). The digests were filtered to remove the black Maillard adducts (which retained part of the radioactivity). The amino acids in the digests were derivatized with dinitrofluorobenzene, and the DNP-amino acids were separated by bidimensional thin layer chromatography (43) on 0.15 mm thick silicagel plates (Polygram Sil G/UV$_{254}$, Mocherey-Nagel, Düren, Germany). The presence of label in amino acid spots was measured as in the case of nucleic acids using the Bio-Rad Molecular Imager. In separate runs, ^{14}C-labelled methionine (NEN, Boston, ma usa) diluted with cold methionine (Sigma) was added to rat plasma, digested, derivatized and processed as indicated above. Thus, the DNP-methionine spot was identified; in any case, the position of standard amino acids in the bidimensional chromatogram was known (43). The derivatization method used prevented the contamination of the plates by radioactive materials different from amino acids, since only the DNP-derivatized compounds were recovered.

An aliquot of 0.2 mL of blood serum albumin (Sigma) dissolved in water (100g/L) was incubated for 2 h at 37 °C with 0.02 mL of a labelled substrate preparation, containing 1 nmol and 5 kBq of ^{14}C-labelled: a) aspartame, b) formaldehyde (Amersham), c) formic acid (Sigma), or d) methanol (Amersham). The samples were then precipitated, washed with 10% trifluoroacetic acid and the precipitates counted for radioactivity. The protein exposed to formaldehyde retained a large proportion of the initial radioactivity added. In the cases of aspartame, formic acid and methanol, only background values were obtained in the washed protein precipitates, showing that none of these procedures resulted in stable label attachment to proteins. The samples of albumin exposed to formaldehyde label were processed in parallel to the sample of plasma (i.e. hydrolysis, derivatization and thin layer chromatography).

TABLE I

Plasma parameters in rats acutely or chronically treated with oral aspartame.

Rat series: Time / group: Parameter	units	Normal 0 h control	Normal 6 h (NA) single dose	Normal 6 h (NC) treated	Cirrhotic 6 h (CA) single dose	Cirrhotic 6 h (CC) treated
Glucose	mM	7.6±0.1^{A}	7.7±0.1^{A}	7.9±0.5^{A}	6.5±0.2^{B}	7.5±0.1^{A}
Urea	mM	6.7±0.4^{A}	6.1±0.2^{A}	5.4±0.5^{AB}	3.6±0.3^{B}	2.9±0.3^{B}
Triacylglycerols	mM	4.1±0.4^{A}	3.2±0.5^{AB}	3.9±0.4^{A}	0.2±0.0^{B}	1.3±0.2^{B}
Total cholesterol	mM	1.47±0.13^{A}	1.72±0.17^{A}	1.64±0.24^{A}	1.87±0.27^{A}	1.87±0.12^{A}
Bilirubin	µM	3.8±1.1^{A}	4.6±1.5^{A}	6.0±1.5^{A}	3.9±2.1^{A}	9.9±2.7^{A}
Total protein	g/L	75±7^{A}	68±7^{A}	71±18^{A}	35±18^{A}	64±4^{A}
Albumin	g/L	43±1^{A}	39±2^{AB}	42±1^{A}	33±1^{B}	37±2^{AB}
Calcium	mEq/L	7.4±0.2^{A}	7.3±0.1^{A}	7.9±0.1^{A}	7.3±0.1^{A}	6.2±1.0^{A}
Ala aminotranferase	µkat/L	0.35±0.06^{A}	0.25±0.01^{A}	0.19±0.01^{A}	0.46±0.23^{A}	0.42±0.11^{A}
Asp aminotransferase	µkat/L	3.3±0.4^{A}	2.7±0.3^{A}	2.5±0.2^{A}	5.2±2.4^{A}	3.1±0.4^{A}
Lactic dehydrogenase	µkat/L	44±8^{A}	40±11^{A}	35±5^{A}	31±2^{A}	46±4^{A}

The data correspond to the mean ± sem of 4 animals per group. Statistical significance of the differences between groups: all groups with different raised letters are different ($p<0.05$, Student's t test).

Results

Table 1 shows the blood chemistry of the rats used. Aspartame administration, either chronic or acute (NC, NA groups), did not result in significant changes in plasma composition of the rats. In the cirrhotic rats, groups CC and CA, the plasma chemistry was deeply altered. The liver cytology (data not presented) together with altered transaminase levels and plasma chemistry showed that the CC and CA rats were affected by liver cirrhosis. The rats with cirrhosis showed lower urea, albumin and, especially, triacylglycerol levels than the controls. Aspartame administration resulted in no changes in plasma chemistry in normal rats.

Figure 1 shows the radioactivity found in several tissues of rats receiving a single oral dose of labelled aspartame. Liver, blood plasma and kidneys showed the higher radioactivity levels, in the range of 0.1-0.4 % in each gram of fresh tissue of the dose administered. Since the dose given to each rat was 10 mg, of which a 10.5 % corresponded to methanol (i.e. 1 mg), 1/1000th of the dose given was just 1 µg, which means that 0.1% of the dose per gram of tissue was equivalent to 1 µg

of methanol/ formic acid/ formaldehyde (≈ 31 nmol ≈ 1 ppm). Liver, thus, contained between 1 and 3.7 ppm of label, while plasma and kidneys maintained very stable levels of about 2 ppm, following administration of a single dose. Chronic administration of aspartame (NC group) resulted in a higher yield of label after the last administration, as observed when comparing the data for 6 hours, ranging from 130-140 % of the value obtained in the single NA group. A fairly conservative estimate may indicate that the daily incorporation of aspartame carbon was in the range between 2 and 4 ppm for liver tissue, i.e. after 11 days the accumulation may be up to 30 ppm. In the cirrhotic rats, the pattern of label distribution was quite similar to that of healthy rats. In general, the amount of radioactivity in liver and kidney was lower, but higher in WAT than in normal-liver rats.

The counting of radioactivity in plasma after acid precipitation of protein (which would set free formic acid and methanol, but not formaldehyde) gave a yield of less than 2 % of total label in the supernatant, i.e. practically all the radioactivity in the plasma at 6 hours was bound to protein. The same experiment done with liver gave a yield of 20-23 % of the label in the supernatant, the rest bound to protein and nucleic acids. The form of the time-course of label present in liver agrees with this finding, since there is a certain decay of label present in that organ with time from a peak at 60 min. This same pattern can be found in several other tissues (brown adipose tissue, muscle, brain and eye), but in the end, a significant part of the label can be assumed to be retained bound to protein.

The specific radioactivity of liver RNA, DNA and protein in the rats treated with very high specific activity labelled aspartame are presented in Table 2. Despite considerable variability in the individual data, RNA showed lower specific activity than DNA and protein had the higher values per mg. The data are also expressed as a ratio of altered versus total structural unit (nucleotide / amino acid), i.e. units incorporating one of the labelled carbons derived from aspartame versus total nucleotides or amino acids. This ratio was obtained by dividing the specific activity found by that of the aspartame in the gavage. The ratios obtained show that the uniformity between protein and DNA was higher than when expressed per unit of weight. Cirrhotic rats showed high liver specific activities, in the same general range as the normal rats did. Roughly, the liver contained about one quarter of its label in "soluble" form, 2/3 in protein and less than 10 % in nucleic acids, with a higher share in DNA than in RNA.

Figure 2 depicts the distribution of label in two thin layer chromatograms, the first showing the label distribution of DNA hydrolysates, from the rats receiving high specific activity aspartame, and the second, run under the same conditions, depicts the location of labelled adenine, guanine and thymine spots. In the DNA hydrolysate, the radioactivity present in the adenine, guanine and thymine spots was nil, since the label was present in another different and distinct spot, which was assumed to correspond to the adduct products of methanol-derived carbon and DNA constitutive bases. The Rf values for the bases and the adduct were quite different: adduct 0.05/0.0 (first run/second run), guanine 0.10/0.22, adenine 0.40/0.43, thymine 0.57/0.49.

The separation through HPLC of the labelled fractions in the DNA hydrolysate resulted in three main peaks, eluting at 7.65, 11.94 and 12.86 min. Thymine eluted at 8.95 min, guanine at 9.42 min and adenine at 12.28 min under the same conditions.

Figure 3 shows the distribution of radioactivity in three thin layer chromatography plates. The first plate shows the label distribution obtained after processing the product of plasma protein hydrolysis from rats treated with high specific activity labelled aspartame. The second plate shows the results of an albumin sample exposed to labelled formaldehyde and ran in parallel with the other samples.

The third plate contains the spot of DNP-methionine. The Rf values for the radioactive spots were: in vivo labelled plasma protein 0.24/0.86 (first run/second run), in vitro labelled albumin: three spots, A 0.02 / 0.0, B 0.38 / 0.0 and C 0.38 / 0.88, DNP-methionine 0.44 / 0.51. The plates were

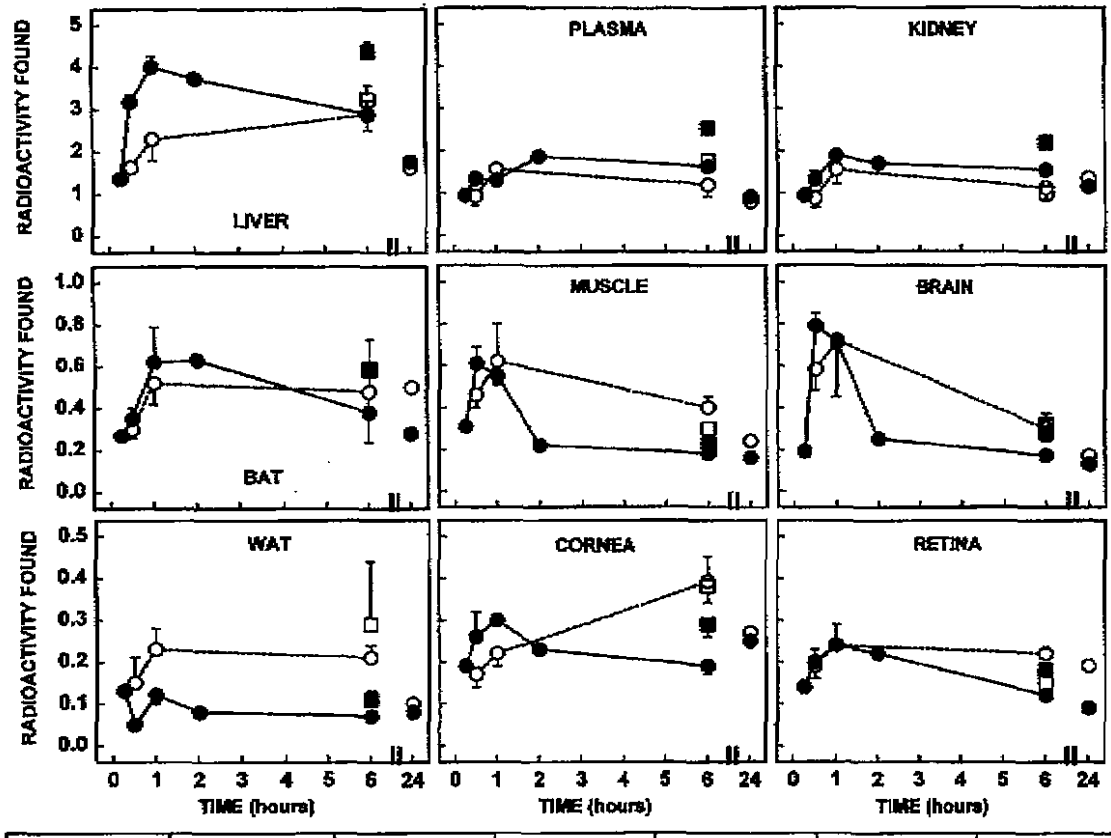

Fig 1

Time course of label presence in several tissues of rats receiving a dose of labelled aspartame.

Black circles: NA group ($N=1_{[15\ min;\ 2,\ 24\ h]}, 3_{[30,\ 60\ min]}, 5_{[6\ h]}$); black squares: NC group (N=5); open circles: CA group ($N=1_{[24\ h]}, 3_{[30\ min;\ 1\ h]}, 5_{[6\ h]}$); open squares: CC group (N=5). BAT = brown adipose tissue (interscapular mass), WAT = white adipose tissue (epididymal fat pads). The amount of label is expressed as thousandths of all the label injected per gram of tissue.

Statistical analysis of the differences between groups. For each tissue/sample the ANOVA-derived P values are given for differences taking into account the group G (cirrhosis versus normal) and time T. Only the significant ($p<0.05$, Student's t test) differences between groups after 6 hours of the gavage are represented for each tissue.

Liver	Plasma	Kidney	BAT	Muscle	Brain	WAT	Cornea	Retina
G: p=0.021 T: p= 0.251 NA-NC; NC-CC	G: p=0.057 T: p=0.019 NA-NC; NC-CC	G: p=0.050 T: p= 0.011 NA-NC; CA-CC	G: p=0.093 T: p= 0.125	G: p=0.111 T: p= 0.956 NA-CA	G: p=0.989 T: p= 0.000 NA-NC; NA-CA	G: p=0.002 T: p= 0.343 NA-CA	G: p=0.409 T: p= 0.364 NA-CA; NA-NC	G: p=0.101 T: p= 0.081 NA-CA

TABLE II

Specific activity of liver RNA, DNA and protein in rats receiving a high specific activity gavage of labelled aspartame.

Group	units	RNA	DNA	protein
NA	dpm/mg	290±190	730±260	810±100
	unit ratio×10^6	30.4	72.8	27.6
NC	dpm/mg	460±240	2410±740	4310±1660
	unit ratio×10^6	48.3	240.2	146.6
CA	dpm/mg	130±40	980±170	2280±670
	unit ratio×10^6	13.6	97.7	77.2
CC	dpm/mg	350±110	590±140	2520±620
	unit ratio×10^6	36.7	58.8	85.7

The data are the mean of two different animals. The specific activity in dpm/mg refers to mg of RNA, DNA or protein. The expression "unit ratio×10^6" represents the number of units (nucleotides, amino acids) incorporating carbon units derived from oral aspartame per million of molecules of the same kind present in liver tissue.

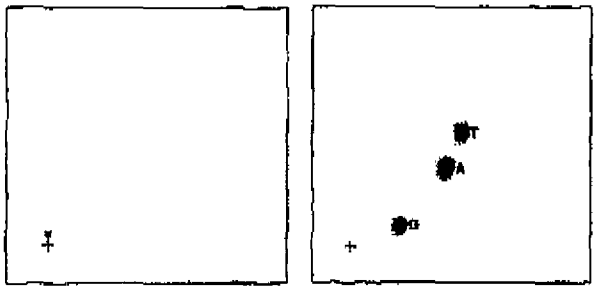

Fig. 2

Distribution of radioactivity in the nucleotides resulting form the hydrolysis of DNA of rats treated with labelled aspartame.

Thin layer chromatograms on cellulose plates showing: the result of the hydrolysis of DNA from rats receiving a high specific activity gavage of aspartame (chromatogram in the left; 25 Bq, 4 days exposure) and standards for adenine A, guanine G and thymine T (chromatogram in the right; 220 Bq each, 1 day exposure)

considerably loaded with sample in order to obtain a minimal radioactivity recording. This resulted in long "tails" and blurred spots. In any case, there was a fair coincidence in one of the spots of in vitro labelled albumin (C) with that observed in the in vivo labelled plasma proteins. The methionine spot was quite different from this one. In addition, the radioactive spot of exposed rat protein (and those of formaldehyde-labelled plasma proteins) were not coincident with any of the standard protein amino acids.

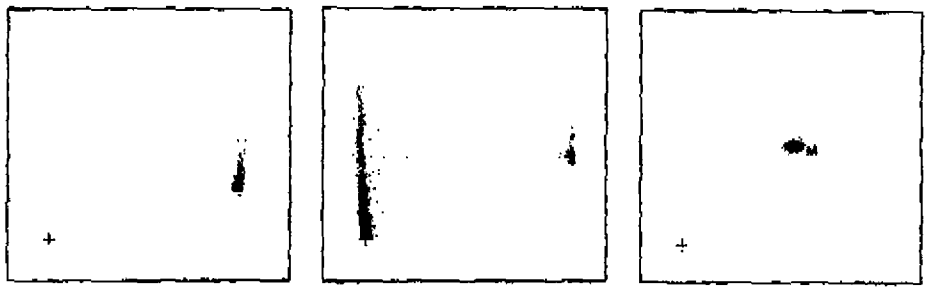

Fig. 3

Distribution of radioactivity in the DNP-amino acids resulting from the hydrolysis of plasma proteins of rats treated with labelled aspartame.
Bidimensional thin layer chromatograms on silicagel plates showing: the spot obtained from hydrolysed plasma proteins of rats treated with labelled aspartame after hydrolysis and derivatization (chromatogram in the left, total about 50 Bq, 4 days exposure), the spots obtained exposing in vitro albumin to labelled formaldehyde, after hydrolysis and derivatization (chromatogram in the center, total about 110 Bq, 4 days exposure) and the spot for labelled DNP-methionine (chromatogram in the left, 180 Bq, 1 day exposure).

Discussion

The lower incorporation of methanol label in most tissues of cirrhotic rats, compared with controls, may be the consequence of reduced liver uptake of substrates, but also the result of a reduced overall metabolic activity in the damaged liver of the rats (44). These effects are clearly reflected by their stunted growth and high mortality rate during the intoxication process, of about 50 % of the rats (36). The relative insignificance of the differences between the normal and cirrhotic groups indicates that the liver is not essential in the process of transfer of aspartame carbon to tissue proteins, i.e. that there is not a direct relationship between the ability to process alcohols and the retention of methanol carbon, bound to tissue components.

The high label presence in plasma and liver is in agreement with the carriage of the label from the intestine to the liver via the portal vein. The high label levels in kidney and, to a minor extent, in brown adipose tissue and brain are probably a consequence of their high blood flows (45). Even in white adipose tissue, the levels of radioactivity found 6 hours after oral administration were 1/25th those of liver. Cornea and retina, both tissues known to metabolize actively methanol (21,28) showed low levels of retained label. In any case, the binding of methanol-derived carbon to tissue proteins was widespread, affecting all systems, fully reaching even sensitive targets such as the brain and retina.

In all groups studied, the label bound found in plasma and tissues corresponds to that injected with aspartame, since there is no other source of radioactivity available. The lack of changes in plasma radioactivity from 1 to 24 h suggests that the half life of this newly added carbon was quite long, thus precluding the possibility that the label detected would simply correspond to unattached methanol. The label bound to plasma proteins was not aspartame either, since the latter is a non-reactive molecular species fully hydrolysed in the intestine (1-2); the peptide never arrived to be in contact with the rat tissues or its components. We were not able to reproduce any direct labelling of

protein exposed either to aspartame, methanol nor formic acid.

Most of the label found in the tissues is the result of the formation of formaldehyde or (in smaller proportion in any case, because of its lower reactivity) formate adducts. Methanol is highly volatile and, eventually, its radioactivity could hardly be taken into account, since the counting method already eliminates this possibility. In addition, the stabilized maintenance of the plasma radioactivity levels could not belong to formate nor methanol, since these unattached substrates are easily taken up and oxidized by tissues, filtered by the kidney or even lost through respiration as occurs with short chain volatile alcohols. The shape of the time-course graph representing the changes in tissue label supports the hypothesis assuming that the label is firmly bound at least for 6 hours after administration of aspartame. This behaviour is also found in formaldehyde-protein adducts (31), long lived species difficult to eliminate, in which the protein is denatured and its original function altered.

The transfer of "one-carbon" units from aspartame to plasma and tissue proteins has been known for a time (35). Its nature, and the mechanism of attachment, however, were assumed to be due to the incorporation of the methanol carbon to normal amino acid structures (essentially forming the methyl group of methionine) through the "one-carbon" tetrahydrofolate and S-adenosyl-methionine pathways (35). The lack of radioactivity in the methionine spot from aspartame-treated labelled rat proteins, however, shows that this assumption could no longer be maintained. The finding of other –different– labelled DNP-derivatized amino acid(s) in the exposed protein hydrolysates confirms that the label was not carried into protein through the one-carbon pool metabolism labelling of methionine, i.e. prior to the synthesis of the protein. The coincidence of this labelled DNP-amino acid residue with that obtained from protein experimentally exposed to formaldehyde confirms that the label fixed to rat proteins after labelled aspartame exposure was derived from formaldehyde adducts, and definitely proves that the label in tissue proteins does not correspond to methionine. This agrees with the incorporation of the label into the fully synthesized protein at a remarkably uniform rate of label distribution between different molecular species in spite of their eventually different turnover (synthesis) rates.

The analysis of label distribution in the nucleic acids shows a remarkable uniformity in the specific activities of DNA and protein, with RNA showing somewhat lower values in the same range. This distribution is in agreement with a fairly uniform exposure to the same reacting species, and could not be explained through incorporation of one-carbon pathways into molecules which show widely different half lives, as is the case with the highly recycled RNA and some proteins and long-lived DNA and proteins . The finding of large amounts of label in DNA, higher than in RNA, could be only explained through direct reaction, since its slow turnover would require inordinately long exposure times to achieve the observed specific activities. The additional existence of different labelled bases, probably formed by the binding of formaldehyde and the "normal" bases not coinciding with any of the other bases. The thin layer chromatograms show a single spot, resolved in at least three peaks, none of which coincided with adenine, guanine nor thymine. The lack of label in these spots is incompatible with the "one-carbon" pathways hypothesis of label incorporation, since two "1C" units are needed for the synthesis of adenine and guanine and one for that of thymine. The presence of label in other different molecules strongly supports the adduct formation postulate, attributing to formaldehyde the main responsibility for the appearance of aspartame-methanol label in tissue components.

The evidence presented, then, proves that a significant portion of the methanol carbon of aspartame finds its way into adducts of proteins and nucleic acids under the conditions tested, both in normal and cirrhotic rats. The results presented show that the carbon adducts of protein and DNA could have been generated only from formaldehyde derived from aspartame methanol, since all the other

biochemical forms in which this carbon may be found could not produce adducts with protein and nucleic acids.

The doses of aspartame given to the rats in this experiment were high, higher at least than that any human may receive daily with normal consumption of the additive –in the range of 2-6 mg/kg·day (46)–, but were similar to those used in comparable tests on rodents in which no ill-effects were detected. These doses were in the same range as the adi for humans established for Canada and the EC (40 mg/kg·day) (46). The dose administered was also lower than that used for toxicity studies, which have shown that even at very high doses aspartame does not produce immediately appreciable harm (17). Most of these studies, however, refer to direct acute toxicity effects, which were not observed either in the rats used in the present study (except, perhaps, for softer droppings in those subjected to the chronic treatment with aspartame gavages).

The amount of label recovered in tissue components was quite high in all the groups, but especially in the NA rats. In them, the liver alone retained, for a long time, more than 2 % of the methanol carbon given in a single oral dose of aspartame, and the rest of the body stored an additional 2 % or more. These are indeed extremely high levels for adducts of formaldehyde, a substance responsible of chronic deleterious effects (33) that has also been considered carcinogenic (34,47). The repeated occurrence of claims that aspartame produces headache and other neurological and psychological secondary effects –more often than not challenged by careful analysis– (5,9,10,15,48) may eventually find at least a partial explanation in the permanence of the formaldehyde label, since formaldehyde intoxication can induce similar effects (49).

The cumulative effects derived from the incorporation of label in the chronic administration model suggests that regular intake of aspartame may result in the progressive accumulation of formaldehyde adducts. It may be further speculated that the formation of adducts can help to explain the chronic effects aspartame consumption may induce on sensitive tissues such as brain (6,9,19,50). In any case, the possible negative effects that the accumulation of formaldehyde adducts can induce is, obviously, long-term. The alteration of protein integrity and function may needs some time to induce substantial effects. The damage to nucleic acids, mainly to DNA may eventually induce cell death and/or mutations. The results presented suggest that the conversion of aspartame methanol into formaldehyde adducts in significant amounts in vivo should to be taken intoi account because of the widespread utilization of this sweetener. Further epidemiological and long-term studies are needed to determine the extent of the hazard that aspartame consumption poses for humans.

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testimony

From: Anni Palmer [annikaye@hotmail.com]
Sent: Friday, February 22, 2008 4:13 PM
To: testimony; senige@capitol.hawaii.gov
Subject: Re SB 2506 to ban aspartame

Please copy and circulate

Thank you for reconsidering this issue. I hope the following will not seem to brusque, I simply believe that this has gone on long enough and must be put to rights now.

I will keep this brief as you will have many to read. I will also avoid scientific info.
This issue has been gathering momentum for well over twenty years. Globally individuals have suffered ill health, had working lives ruined and we have seen increases world wide in diagnosed Diabetes, depressive illness and other psychological disorders, M.S, Alzeimers and Chronic Fatigue to name only a few of the ailments knowingly attributed to aspartame and treated by numerous doctors who are highly aware of the toxic effects.
You don't need to be a scientist to recognise that when you have excessive numbers of people all over this planet reporting ill effects of a substance identified as a common
factor and when that common factor is removed from the diet huge numbers of people see their symptoms abate and very often disappear after approximately 60 days, that there is a problem. Problematic too is that many people will not know that aspartame is the cause of their debilitating illness and not know that they have a choice to detox and will continue to suffer unnecessarily. My children can put those facts together and see the issue.
To turn a blind eye to all the data that has over time been

presented by experts in their field of medicine and favour research presented by those with vested interest is to demonstrate a moral deficiency equal to the lack of integrity displayed by those hell bent on bringing this to the market in the name of the mighty dollar and ego gratification way back then.
I hope you will see this worthy of consideration.

sincerely
Andrea (Anni) Palmer
P.O Box 60293
Titirangi
Auckland
New Zealand

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testimony

From: Unizion [kim@unizion.co.uk]
Sent: Saturday, February 23, 2008 4:18 AM
To: testimony
Subject: Re: To Senator David Ige and Senate Health Committee: Re: SB 2506 to ban Aspartame

To Senator David Ige and Senate Health Committee: Re: SB 2506 to ban Aspartame

Thank you for scheduling this committee meeting Monday.

"Please copy as committee handout for this hearing."

Dear Senator Ige:

I am writing to tell you of the dangers of aspartame in the human diet.

I have a personal story to tell and one of 2 friends who have suffered at it's hands.

My husband works in Air Traffic Control in Gatwick, West Sussex, England and as you can imagine he is in a fairly stressful job. He had been trying to lose some weight and decided to start drinking a low-calorie diet drink - he always drinks a vast amount of fluids so he was changing to over 2 litres a day of this poison. He been drinking it for a number of months and we didn't notice anything at first until one day he started getting rather high - hypertensive and elevated.

He came home one day and started saying things that didn't make sense, I wasn't at all sure what was going on at first as I had a personal tradegy to deal with at the time which didn't help. The next day he came to pick me up from a friends and he was late, he is never late and he was very florrid. By the evening he had got worse and was maniacally laughing, I called for medical help and he was eventually sectioned, he took 3 months off work trying to recover, he could hardly climb the stairs and he was PUTTING ON weight.

I found out about aspartame purely by accident by researching something else. I told him to come off it immediately and the results were miracalous! He could climb the stairs and he was a different man - this happened in the psace of a few days!!! He had no history of mental illness so we can only presume it was the aspartame - and he has stayed well ever since. PLEASE BAN THIS DEADLY NEURO-TOXIN.

My other friend kept getting admitted to the hospital with severe stomach pains and there seemed to be no real medical basis for it - this had been happening for 6 months - I checked what she was eating and noticed she had been consuming her favourite mints LOADED WITH ASPARTAME. She stopped eating them and has never been back to the hospital since.

A young teenage student of mine had mulitple symptoms, lose of feeling in her hands, disrupted periods, enormous weight gain - She came off diet drinks and lo and behold... she lost the weight and health is back to normal. For a teenager it was very scary to not know what is wrong with you when she was embarking on a acting and singing career.

Please SAVE THE PEOPLE OF THIS PLANET.

Thank-you

Mrs Kim Dixon

www.322.org.uk

testimony

From: William Cote [wpcote@cox.net]
Sent: Friday, February 22, 2008 8:38 PM
To: testimony
Subject: aspartame

Dear Legislator,

PLEASE ban this toxic substance from being used in Hawaii.
Mahalo,

William Cote

testimony

From: Spice Williams-Crosby, BSc, MFS [spicewc@earthlink.net]
Sent: Sunday, February 24, 2008 12:27 PM
To: testimony
Subject: Neurotoxin = Aspartame

From the Desk of

Spice Williams-Crosby, BSc, MFS, CFT

click on dove

February 24, 2008

To: Senate House Committee on Health, SB 2506
Via E-Mail: testimony@capitol.hawaii.gov.

From: Spice Williams-Crosby, MHN, MFS, CFT

Re: Aspartame

To Whom It May Concern:

My 13 year old son has had diabetes since he was 18 months old. He eats extremely healthy, no dairy, no sugar and no refined carbohydrates. He is not obese and his A1c levels are constantly at 6.4. The above mentioned foods are the foods that destroy a person's body, especially one who has diabetes. Obesity and diabetes are caused by junk food and processed foods. Aspartame, a artificial sweetener, is NOT going to stop people from becoming obese and will cause multiple injuries the diabetic's neurons causing massive inflammation. If there were NO substitutes for the world, I could see where the dilemma would stand. But, because of products like JUST LIKE SUGAR and stevia, this argument has no legs to stand on. They are simple and easy to use and taste great.

Aspartame is an excitotoxins that causes inflammation of the neurons before it kills them. This inflammation is now being looked at as a precursor and possible

cause to diabetes. There is a large portion of our population now considered obese with the thinking that if they drink a diet soda and use aspartame, that they are doing their body good. On the contrary, aspartame consumption can lead to cancer, MS, ALS, Alzheimer's, Parkinson's, seizures and diabetes.

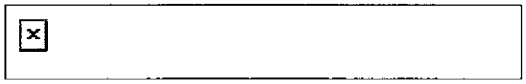
Just recently, a new study done on diabetes shows us that it is not an autoimmune disease, but one of a neuron inflammation to the islet cell. Individuals who are constantly worrying about their weight will fall victim to the high pressured ads on television, Internet or magazines today about aspartame being safe and sound for them, especially if they have diabetes.

In Canada, Scientists cured twenty-one mice with diabetes over night. It appears the nervous system and inflammation play an enormous key role in diabetes. This study was just recently published in December of 2006 by Tom Blackwell, National Post; CanWest News Services.

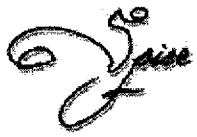
When inflammation occurs it contributes to the eventual death of insulin-producing islet cells in the pancreas. Dr. Hans Michael Dosch, an immunologist at the hospital and a leader of the studies had concluded that in a 1999 paper there were surprising similarities between diabetes and multiple sclerosis. He noted that there were an "enormous" number of nerves around the insulin-producing islets cells and pain neurons primarily used to signal the brain that tissue has been damaged. It turns out the nerves secrete neuropeptides that are instrumental in the proper functioning of the islets.

Aspartame cannot be continued to be offered to our human race. The evidence is overwhelming when it comes to ALS, Alzheimer's, Parkinson's, MS and brain cancer. But, now, the evidence is showing us that it can actually cause diabetes.

Sincerely,



"For the health of it!"



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"Science is the belief in the ignorance of experts." - *Dr Richard Feynman, Nobel Laureate winner*

"**Alternative Medicine**" is defined as any protocol, action, or therapy that isn't drugs, radiation, or surgery oriented." Wrongfull named? Yes. So-called "alternative medicine" is actually the health choice of planet earth. It is a combination of every good heatlh idea invented by mankind, in every country and culture on this planet. There is nothing **"alternative"** about it!

testimony

From: Spice Williams-Crosby, BSc, MFS [spicewc@earthlink.net]
Sent: Sunday, February 24, 2008 1:32 PM
To: testimony
Subject: Aspartame & FDA

From the Desk of

Spice Williams-Crosby, BSc, MFS, CFT

click on dove

February 24, 2008

To: Senate House Committee on Health, SB 2506
Via E-Mail: testimony@capitol.hawaii.gov.

From: Spice Williams-Crosby, BSc, MFS, CFT

Re: Aspartame

To Whom It May Concern:

As a healthcare practitioner, it's amazing to me that some people still think the FDA protects the public against dangerous drugs. If this is so, why was Aspartame approved? Why are there over 740,000 people killed each year due to medical experiences involving FDA approved drugs? According to JAMA, number 3 of the 5 top killers is Medical Malpractice involving drugs. The pharmaceutical industry did $182 billion in drug sales worldwide, but it

Cost approximately $183 billion to treat adverse reactions from all of those drugs. 20% of all the people who see an allopath will suffer an iatrogenic (doctor induced) injury and 16% of all people who die in the hospital are determined by autopsy to have died of something other than their admission diagnosis. American Medical News stated that 28% of the people admitted to hospitals are there because they have suffered an adverse reaction to prescribed drugs. In this year, 2005, over 70% of the population uses Aspartame with known contraindications with all drugs and vaccines.

May 11, 1999 WASHINGTON (CNN) -- Hoping to decrease the

100,000 patient deaths caused by medication side effects each year, the U.S. Food and Drug Administration has announced plans to improve patient safety.
The FDA has come under fire from consumer groups who say five drug recalls since September 1997 show the agency may have approved drugs too quickly or without adequate testing.

The mission of the FDA is to protect the safety and wholesomeness of food. The agency's scientists test samples to see if any substances, such as pesticide residues, are present in unacceptable amounts. If contaminants are identified, FDA takes corrective action.

Why then has an EPA report found that 95% of human exposure to dioxin, a known carcinogen, comes from consuming red meat, fish, chicken, dairy products and eggs. And that the FDA Total Diet Study shows 82 industrial chemical and pesticide residues were detected in Ground Beef, representing eleven formulations?

It is very well known that the AMA for many years abused its position of power by selling its "approval" seal to advertisers whose products were unsafe and unhealthy. It was all about money. Competing products that contained virtually the same ingredients would be found on both the AMA's "approved" and "disapproved" lists at the same time, the only distinction between them being whether a particular manufacturer advertised in the Journal of the AMA. Phillip Morris was the AMA Journal's biggest advertiser in the 1940's, which made it impossible for any doctor who preached that "smoking was bad for you" to stay in good standing with Dr Morris Fishbein, president of the AMA up until 1949.

Today, the FDA regulates over one trillion dollars worth of products, which account for 25 cents of every dollar spent annually by American consumers. Hmmm, where was the FDA when 65% to 99% of US cattle were given hormones to speed up and enhance their growth? This action perpetrated estrogenic and androgenic burdens on humans that unquestionably cause cancer. Puerto Rico in the 1980's was suddenly dealing with an epidemic level of premature puberty in eight year-old children due to the high estrogen levels in chicken and pork. DES (diethylstilbestrol) found its way into our animals, and in 1980, there were shocking reports of children experiencing hormonal imbalances at two and three years of age. The United States banned DES in 1979, but that didn't stop 49 drug distributors from continuing to use it. By 1983, DES was still being used illegally by American cattle ranchers in 318 feedlots in 20 states. Dimetridazole, ipronidazole and carbodox, all known human carcinogens, are still used in livestock. And the government still has not approved 90% of the nearly 30,000 animal drugs now in use.

How can we trust the FDA when they continue to allow dangerous drugs into our food supply? Products like Aspartame have over 92 adverse reactions, including death, and over 10,000 complaints registered. I find it interesting that several board of inquiries were overruled by Dr Arthur Hull Hayes, Jr. Who ended up leaving his appointed FDA position for greener pastures as a consultant with a subsidiary of the GD Searle Company, manufacturers of aspartame! The FDA also apparently feels that it's in our best interest to allow the Monsanto Corporation to market rBGH (recombinant bovine growth hormone), a genetically engineered

hormone that is injected into dairy cows to increase their production of milk. According to "The Politics of Cancer, Revisited," by Dr. Samuel Epstein, M.D. Published in 1998 by East Ridge Press, it is directly linked to breast, colon and prostate cancer.

I don't need to go into all the lies, deceit and political involvement of these approval process on Aspartame for I know you've had all the documents handed to you by the leaders of this anti-aspartame movement. But what I do want you to realize is that you are in a position to take our America back! You can stand up to these corporations, associations and government agencies that have become nothing more than organized crime institutions that are considered legal by our un-American levels of government.

How many people have to die until someone will stand up and say, "NO MORE!" I'd like to point out how the FDA's faster and more lenient approach helped allow pharmaceutical companies and food corporations to market new products. Products that proved to be fatal.

- In February, 2000, FDA administrators dismissed one of its medical officer's emphatic warnings and approved Lotronex, a drug for treating irritable bowel syndrome. Lotronex has been linked to five deaths, the removal of a patient's colon and other bowel surgeries. It was pulled off the market on Nov. 28, 2000.

- The diet pill Redux, approved in April 1996 despite an advisory committee's vote against it, was withdrawn in September 1997 after heart-valve damage was detected in patients put on the drug. The FDA later received reports identifying Redux as a suspect in 123 deaths.

- The antibiotic Raxar was approved in November 1997 in the face of evidence that it may have caused several fatal heart-rhythm disruptions in clinical studies. FDA officials chose to exclude any mention of the deaths from the drug's label. The maker of the pill withdrew it in October 1999. Raxar was cited as a suspect in the deaths of 13 patients.

- The blood pressure medication Posicor was approved in June 1997 despite findings by FDA specialists that it might fatally disrupt heart rhythm and interact with certain other drugs, posing potentially severe risk. Posicor was withdrawn one year later; reports cited it as a suspect in 100 deaths.

- The painkiller Duract was approved in July 1997 after FDA medical officers warned repeatedly of the drug's liver toxicity. Senior officials sided with the manufacturer in softening the label's warning of the liver threat. The drug was withdrawn 11 months later. By late 1998, the FDA had received voluntary reports citing Duract as a suspect in 68 deaths, including 17 that involved liver failure.

- The diabetes drug Rezulin was approved in January 1997 over a medical officer's detailed opposition and was withdrawn this March after the agency had linked 91 liver failures to the pill. Reports cite Rezulin as a suspect in 391 deaths

- The nighttime heartburn drug Propulsid was approved in 1993 despite evidence that it caused heart-rhythm disorders. The officials who approved the drug failed to consult the agency's own cardiac specialists about the signs of danger. The drug was taken out of pharmacies in July after scores of confirmed heart-rhythm deaths. Overall, Propulsid has been cited as a suspect in 302 deaths. The FDA's handling of Propulsid put children at risk. The agency never warned doctors not to administer the drug to infants or other children even though eight youngsters given Propulsid in clinical studies had died. Pediatricians prescribed it widely for infants afflicted with gastric reflux, a common digestive disorder. Parents and their doctors had no way of knowing that the FDA, in August 1996, had found Propulsid to be "not approvable" for children.

- August 2003, The Million Women Study, published in the Lancet, provided new evidence that conventional HRT (Premarin & Provera) not only increases the risk of breast cancer, but also ups the chances of dying from the disease, along with heart attack, strokes and blood clots. And in 2003, findings from the study called the Women's Health Initiative Memory Study (WHIMS) were announced stating that women on HRT combination (estrogen/progestin) experienced twice the risk of developing dementia. Thousands of women became fatalities because of these FDA approved drugs.

So you see, how can we trust the FDA to tell us that Aspartame was approved as a completely safe sweetener? They also said Fen-Phen - fenfluramine and dexfenfluramine, Baycol, Vioxx were safe. And if you do your research, you'll find the FDA approved of the polio vaccine in 1960, knowing that it housed the Simian Virus 40 that Dr. Bernice Eddy, a federal employee tested extracts from the monkey kidney cells used to make polio vaccine. She discovered the SV40 was a cancer-causing agent. The FDA was reluctant to act on reports of SV-40 knowing that the contamination was detected in the rhesus monkey kidney cells used to make and injected into 98 million innocent people. The SV-40 has been detected in human brain tumors, e.g. Bergsagel et al. New England Journal of Medicine 326:

988-993, 1992. SV-40 has also been detected in a high proportion of human mesotheliomas (Carbone et al. Oncogene 9: 1781-1790, 1994); and in bone tumors called osteogenic sarcomas (Carbone et al. Oncogene 1996). And now…the FDA says Aspartame is safe because all the manufacturers, from G.D. Searle to Ajiinomoto of Japan, say it is.

With all this information you both have received on this toxic chemical, can you honestly say you would want you mother, father, children, grandchildren and there after to consume this stuff? I'm a healthcare practitioner with Masters in Fitness Science, Bachelors in Holistic Nutrition, currently perusing my PhD in Holistic Nutrition. and spent over 20 years nutritionally counseling folks that have been sent home to die or with no hope for help from our medical community. The minute I find out they have been a user of aspartame and remove that substance from their lives, they begin to lose all the know symptoms that have been registered with the FDA for years. You don't need to be a Harvard genius to put those pieces together.

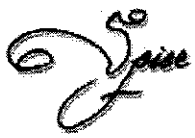
I believe God blesses you and that you are in the position you are today to help, change for the better and assist your state to achieve high levels of growth with health. But remember the rippling effect, for your decision will possibly be the first ripple to help bring our America back. Please do the right thing. Don't let the big pharmaceutical companies and corporations control our lives by manipulating your truths.

Thank you and may God help us all….

"In a perfect world...
Everyone would be full of love.
Everyday would have blue skies.
Every country's bird would be a white dove.
And Corporate America would tell no lies."

Spice Williams-Crosby, BSc, MFS, CFT

"For the health of it!"



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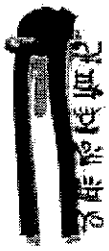

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testimony

From: Tony Orman [greywolf94@yahoo.com]
Sent: Sunday, February 24, 2008 4:54 AM
To: testimony; senige@capitol.hawaii.gov
Subject: SB 2506 to ban aspartame

Dear Senator Ige

My name is Tony Orman, I am 40 years old, I have an MBA and I have MS. Before you start feeling bad for me, I haven't had a problem in almost 2 months. I have never had a remission last this long and I feel and think better than I have in years. What changed? My diet namely. I gave up pork, lamb, dairy and beef.

The other thing is I gave up was Diet Dr. Pepper. I had been a loyal drinker for 15 years with an occasional Diet Coke thrown in. I have been off the Diet Dr. Pepper for a little over 2 months and my MS symptoms are gone. They went away within 3 weeks of quitting Aspartame. I did a lot of research on Aspartame and its side effects. They include Lupus, Parkinsons, Fibromyalgia , MS , ALS and other nasty diseases. The FDA has had over 10,000 complaints and logged 92 different symptoms. The Philippines has banned it, New Mexico was trying to ban it and the EU is taking a hard look at it. By the way, if you Google it, you get over 3,000,000 web pages (most all are against it).

I was a commercial real estate appraiser making over $90,000 a year and I had a good life, that is gone now. I'm not sure I'll ever get over all of the problems caused by Aspartame but I do want to try. There are dozens of doctors that have written about how bad this stuff is for you and no one is listening. Yelling would be more like it, let the public know what they are consuming.

One of the problems is that most of the doctors don't even know what to say or what to believe. I have never had a physician even mention the remote possibility that my diet was causing my problems. I wish they had at least suggested that I try cutting out the Aspartame. There are hundreds of studies, some by the FDA, and they all support the conclusion that Aspartame will make you very ill. The other thing, I can't buy insurance now because of the "MS", there are some jobs that I won't even be considered for since I was diagnosed with MS and people just look at me differently than they did a year ago.

Thank you for your time.

Sincerely,

Cherokee Village , Arkansas

Tony Orman

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testimony

From: Tony Orman [greywolf94@yahoo.com]
Sent: Sunday, February 24, 2008 4:58 AM
To: testimony; senige@capitol.hawaii.gov
Subject: SB2506 to ban aspartame

Dear Senator Ige:

Greetings and hello. I wrote to you earlier today regarding the bill to ban Aspartame from the great state of Hawaii . I feel so strongly about this issue, I had to write to you again. In the coming days you are going to hear from a number of people that have been seriously affected as well as the lobbyists that say it is perfectly safe. What to do, what is the answer? Examine all of the evidence, consider your populations' general health and consider the decline of the overall general health of the entire population of the US . Your own state health department can give you accurate statistics of the number of neurological diseases and the increase in those diseases since 1980. The one to pay particular attention to is the increase in Multiple Sclerosis in women versus men. Nearly 4 times as many women as men have developed MS in the past 10 years. Why is this? Possibly because women are heavier users of diet products and Aspartame? I think it is.

In my own case, I have been using it for 15 years and a heavy user for the past 3 years. At some point my body reached critical mass and I developed MS. I was diagnosed with progressive MS and I was supposed to get worse with time. I have a good friend that has primary progressive MS, he is 42 and has been in a wheelchair for the past 9 years. He is bedridden now and can no longer communicate. Both he and his wife are diet coke drinkers and have been for years. Did this have anything to do with his MS? I don't know but it would be interesting to test him and find out. Over the past 3 weeks I have met 3 people that have Fibromyalgia and one that has MS. I live in a rural area of Arkansas and there should not be that many people with neurological disorders here.

I am taking the time to write to you again because I often wonder what I would think and do if I were in your position. It is not and easy decision and should not be taken lightly. However, when you stop and think about the uninformed people in your state that have no idea what they are consuming I believe you have to take action. They are your constituents and they are relying on you to keep them safe. I'm sure there are a large number of people that have no idea this legislation is even pending. If the industry has their way, they never will.

Ask the industry lobbyists if they would be willing to have a truly independent research facility test Aspartame, are they willing to have an open, well publicized debate on its effects and how much money is on the line for them? They have a huge financial interest in keeping Aspartame on the market and will do whatever it takes to do so. Also, ask yourself what impact this will have on your own state. Sugar prices have been down a long time due to the popularity of artificial sweeteners. I'm sure the

local growers would love to see their product in demand once again. Also, what about the artificial sweeteners that can be made from sugar? This will satisfy the diabetics and those that cannot consume sugar.

As for me right now? I have been off of Aspartame for two months and I have not felt this good in 10 years or more. I was using a cane on a daily basis and a walker back in August. My symptoms were horrendous and I felt like a little, feeble old man. I am 40 years old and I want to live my life to the fullest and now I can. I have started going on hikes in the woods and I'm even getting a home gym next week. If you had told me that I would be working out again I would have never believed it. I have so much energy now and I am thinking so clearly, I can't wait to get started and again, it has only been two months.

Thank you for your time and attention to this very serious matter. I hope you will do what is right for your people, protect their safety and ban Aspartame as soon as possible.

Tony Orman

Cherokee Village , Arkansas

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testimony

From: Diana Buckland MCS-Global [dbucklan@bigpond.net.au]
Sent: Sunday, February 24, 2008 3:12 PM
To: testimony; Sen. David Ige
Subject: Support for global ban on Aspartame - from Diana Buckland, Australia and Videos In Peril - Chemically Injured

Importance: High

Dear Sir/Madam,

Please watch this U Tube on Chemical Injury and I am here to vigorously support the work of Dr. Betty Martini and others,
calling for a global ban on aspartame. We have a serious problem with global chemical pollution, illnesses & diseases of which aspartame is a serious part.

Thank you, Diana Buckland, Australia

Part 1 http://www.youtube.com/watch?v=Bb4LoF99qr0 and Part 2 http://www.youtube.com/watch?v=71Qmxd-va2g

Dear All,

This is only part of the story done in a short 10 min. documentary - (it was
20 hours, but only 10 mins. allowed so a lot cut out but still gets a message out there)
my son was on many medications - he was on ritalin, dexamphetamine, different anti depressants, but also the anti psychotic risperidone - he just got worse and worse - doctors are not looking at the effects from environmental poisons (neurotoxic poisons) such as pesticides et al and these terrible drugs are making the problems much worse. See my son James' story in our real stories section:-
Real Stories http://www.mcs-global.org/stories.php
James' story http://www.mcs-global.org/pstory/james_story.php

See my website www.mcs-global.org <http://www.mcs-global.org>
also particularly see
pesticides section http://www.mcs-global.org/Pesticides.htm
and I think this has extreme relevance also:-
http://www.mcs-global.org/Documents/PDFs/Pesticides/THE%20WORLD%20CRIME%20EPIDEMIC%20by%20A.A.%20Gomez%20%2026%20Nov.%202002.pdf

see also other chemicals http://www.mcs-global.org/Chemicals.htm
and http://www.mcs-global.org/Technical%20Papers.htm
and much more.

I believe the shocking effects of these dangerous toxic and neurotoxic chemicals are contributing heavily to not only serious physical health problems but to many mental health problems - none of which are being addressed by mainstream medicine and psychiatry, all they do is drug them - we also know cancer of all forms, is out of control of which there is more evidence than ever, that environmental contaminants are responsible.

I hope that this video Part 1 and Part 2 will be of great help to many who are struggling for answers.

Thank you for everything you do.

My best wishes, Di Buckland, Australia

Part 1 http://www.youtube.com/watch?v=Bb4LoF99qr0 and Part 2
http://www.youtube.com/watch?v=71Qmxd-va2g

Diana Buckland

MCS-GLOBAL WEBSITE: www.mcs-global.org <http://www.mcs-global.org>
<http://www.mcs-global.org>
Awareness, Education, Information & Recognition of Chemical Injury,
Chemical Hypersensitivity, Chemical Sensitivity/MCS & other chemically
induced illnesses & diseases affecting civilians & military personnel
Global Chemical Pollution & the disastrous effects on human health &
environmental health
Cancer and the chemical connection
Kallangur, Queensland, Australia
phone 61+7+32853573
Email: dbucklan@bigpond.net.au <mailto:dbucklan@bigpond.net.au>
<mailto:dbucklan@bigpond.net.au> or diana@mcs-global.org
<mailto:diana@mcs-global.org> <mailto:diana@mcs-global.org>

Also, please see information on Parents against Teen Screen

Only 119 signatures needed to reach 25,000 on the TeenScreen petition!
- Please pass the word:
Video: http://www.youtube.com/watch?v=RfU9puZQKBY *Petition:
*http://www.petitiononline.com/TScreen/petition.html

testimony

From: Patrick Wiebe [pwiebe@multinix.com]
Sent: Monday, February 25, 2008 2:40 AM
To: testimony
Subject: SB2506 Ban Aspartame, hearing in Senate Health, Room 16; 1:15 PM, 2/25

Honorable Members of the Hawaii Senate Health Committee:

Thank you very much for considering SB2506, the Aspartame Ban.

I was in High School during the late 1970s when aspartame was approved by the FDA. I lived near Searle Labs where it was developed. In the years prior to it's approval, it was available for use by employees of the lab, one of whom took some home and provided it to my mother who became one of the first people outside of Searle Labs to use it.

My mother went on to become a regular consumer of aspartame, drinking several cans of diet soda per day as well as adding it to her food. She continued to consume aspartame at this rate until her death a few years ago.

Corresponding almost exactly to the time she began to use aspartame she developed brachial plexus neuropathy. She then went on to develop a very complicated, difficult to diagnose and painful combination of neurological and autoimmune disorders. These led to a serious reduction in her quality of life, and could only have been related to her use of aspartame.

I believe as one of the first people to use aspartame on a regular basis my mother is an indication of the sort of medical problems that could soon become much more common.

I would urge you to act without any further delay and support this effort to ban aspartame in Hawaii, help protect the health of Hawaiians and make it unnecessary for others to go through what my mother did.

Sincerely,

Patrick Wiebe
US Citizen Living Abroad in The Netherlands pwiebe@multinix.com

testimony

From: Mark D. Gold [mgold@holisticmed.com]
Sent: Sunday, February 24, 2008 10:18 PM
To: testimony; Sen. David Ige
Subject: Testimony for: SB2506 "Ban Aspartame in Hawaii"

To: Honorable Members of the Senate Health Committee
From: Mark D. Gold, Director, Aspartame Toxicity Information Center
(12 East Side Dr., Suite 2-17, Concord, NH 03301, 603-225-2110,
aspartame@holisticmed.com, http://www.holisticmed.com/aspartame/
)
Re: SB2506 "Ban Aspartame in Hawaii"
Date: February 24, 2008

I have been asked to address the Committee since I am familiar with the world research on aspartame and have been receiving thousands of case histories related to aspartame toxicity since the early 1990s. It was suggested to me that I address a particular manufacturer-funded aspartame review that was given to the Committee in defense of aspartame's "safety."
Therefore, this testimony focuses on the conflict of interest and then the misrepresentation of research in the manufacturer review provided to the

Committee. Should you have any further questions, please do not hestitate to contact me. Thank you.

In 2007, a review of aspartame entitled, "Aspartame: A Safety Evaluation Based on Current Levels, Regulations, and Toxicological and Epidemiological Studies"
was published in the scientific journal, "Critical Reviews in Toxiology"
(Magnuson 2007).
Shortly after the publication, a flurry of press releases proclaimed, "A new review of aspartame research -- the most comprehensive ever conducted -- once again has concluded the widely used sugar substitute is safe, even among its heaviest users" and "International Scientists Conclude Sweetener Is Safe Across Population Groups." What these press releases did not tell readers is that this review was funded by the aspartame manufacturer, the authors had serious conflicts of interests, and in page after page after page of the review, research was misrepresented and important research and information was omitted from the review. This analysis is intended to help readers understand how manufactures pay for and get published reviews that put their toxic products in a positive light.

A. Conflicts of Interest

The review was funded by Ajinomoto of Japan. Ajinomoto along with Monsanto have been the world's biggest producers and sellers of aspartame. The authors of the review had numerous, obvious conflicts of interests as described below.
Yet this information was apparently not disclosed to the journal it was published in. The parent company of the journal stated in a press release that, "There were no known conflicts of interest with the sponsor or potential biases of the authors" (Informa 2007).

Two of the authors, Robert Kroes and Gary Williams joined with Ian Munro, the president of the Cantox Health Sciences International corporate advocacy group, to work with Monsanto to review its herbicide, glyphosate (Williams 2000). The work of these authors, directly with and

for Monsanto, was not disclosed in this aspartame review.

Cantox (now known as Intrinsik) is famous as a corporate advocacy group for whitewashing the dangers of Agent Orange, another toxic product created by Monsanto (Dominion 2007). In 2002, the president of Cantox worked directly with NutraSweet company employees and consultants on an aspartame review where he stated: "After 30 plus years of rigorous

scientific research, it is time to put questions of aspartame safety to rest. ...
The continuing debate over such a 'nonissue' only serves to divert attention and the

allocation of resources from more important health issues that need to be addressed." (Butchko 2002).

Bernadene Magnuson, the lead author of this review was also the Senior Scientific and Regulatory Consultant for Cantox Health Sciences International, a Monsanto-funded corporate advocacy group mentioned above (UT 2008). The president of Cantox had already called aspartame toxicity a "nonissue," yet the lead author of this review worked for Cantox!

Bernadene Magnuson became a member of the corporate advocacy group, The Burdock Group in 2005. (Nutra 2005). The Burdock Group offers its clients "technically rigorous, comprehensive safety and regulatory management of their products. .... The Burdock Group offers the highest quality consulting services for the safety and regulatory issues facing the Food and Beverage, Dietary Supplement, Cosmetics/ Personal Care and Pet Food Industries. Together, we form a cohesive team that offers single-source solutions for your business's safety assessment and regulatory needs." (Burdock 2008). This author's work for pro-aspartame advocacy group, Cantox and corporate advocacy group, Burdock Group directly with and was not disclosed in this aspartame review.

Gary Marsh has had researched funded by the Formaldehyde Institute, a trade association consisting of Monsanto, Dupont and other chemical companies (CSPI 2008a, Tataryn 1983). The Formaldehyde Institute raised money for research in an attempt to portray formaldehyde exposure in a good light. Since independent published research has shown that aspartame ingestion leads to formaldehyde accumulation in the brain, kidneys, liver and other organs and tissues (Trocho 1998), Gary Marsh's research for the Formaldehyde Institute is a serious conflict of interest. This author's funding from the Monsanto-supported Formaldehyde Institute was not disclosed in this aspartame review.

Michael Pariza was a scientific advisor to the industry-funded advocacy group, "American Council on Science & Health" (ACSH) (CSPI 2008a). According to

an article in the Washington Post:

"In 1982, the American Council on Science and Health (ACSH) filed a friend-of-the-court brief in a Formaldehyde Institute lawsuit that overturned a federal ban on formaldehyde insulation. .... At least a third of ACSH 's funding comes from such companies as Allied Corp., Coca-Cola, the National Soft Drink Association, Colgate-Palmolive Co., Dow Chemical Canada, du Pont, Eli Lilly, Exxon, General Mills, General Foods Fund, Gulf Oil, Hershey Foods, Johnson & Johnson, Kellogg's, Monsanto Fund, Mobil Foundation, M&M/Mars,

Pillsbury Foundation, Procter & Gamble, Pfizer, Shell Oil, Upjohn and Velsicol Chemical." (Kurtz 1984).

Michael Pariza is also a member of the Board of Trustees of the International Life Sciences Institute (ILSI), a chemical and food company research association funded by Ajinomoto, Monsanto, Coca Cola, PepsiCo, Nestle, and many other food and chemical companies involved in the production, use and sale of aspartame (Nutrition 2003, CSPI 2008b, ILSI 2005).
This author's official positions within industry associations funded by Ajinomoto and Monsanto were not disclosed in this aspartame review.

Ronald Walker spent seven (7) years as the ILSI's Chairman of their Scientific Committee on Toxicology/Food Safety in Europe (Walker 2001). As mentioned above, ILSI is funded by Monsanto, Ajinomoto, Coca Cola, Pepsi Cola, etc. He was a consultant for DSM Nutritional Products, a company that sold "Twinsweet" from Holland Sweetener Company which is a mixture of aspartame and acesulfame-k. The DSM web site contained aspartame advocacy articles written by Holland Sweetener Company (Walker 2007, DSM 2008). He was a consultant Numico Beheer BV / Danone Group, a company that had a joint venture with Ajinomoto (the sponsor of this review) (Walker 2007, Asia 2007).
He is a paid consultant to the corporate public relations group, the European Food Information Council with corporate members that include Coca Cola, PepsiCo, Danone, Nestle, etc. (Walker 2007, EUFIC 2008). Finally, he was a paid consultant for Cantox Health Sciences International (Walker 2005).

Ronald Walker wrote a glowing review of another Ajinomoto product, monosodium glutamate (MSG) for a symposium funded by an Ajinomoto trade group, International Glutamate Technical Committee (IGTC) (Walker 2000). He has participated in another aspartame review

where he claimed that aspartame was safe (SCF 2002). This author's funding from companies selling aspartame, official positions with associations who are supported by aspartame manufacturers and marketers as well as his past positions defending aspartame was not disclosed in this aspartame review.

John Doull was a paid consultant of Monsanto, a member of the Monsanto-funded ACSH Advisory Board, and a Trustee of the Monsanto- and Ajinomoto-funded corporate research association, ILSI (Tobacco 1993, CSPI 2008). This author's consultancy with Monsanto and official positional within Monsanto- and
Ajinomoto-
funded associations was not disclosed in this aspartame review.

A reader might ask, "Is it possible for there to be an unbiased review of aspartame, made by Ajinomoto and Monsanto, where the review is funded by Ajinomoto, three of the authors have done paid work for Monsanto, several authors have offical positions in trade and research associations funded by Monsanto, Ajinomoto, Coca Cola, PepsiCo, etc., several authors work for corporate advocacy groups, one of which called aspartame toxicity a "nonissue," and one author who consults for companies that sell aspartame and in the past has said that aspartame is safe?" I think a reasonable answer might be, "No! Are you kidding me?!"

B. Misrepresenting the Research

It is extremely common for "Reviews" funded by manufacturers of unhealthy or toxic products to misrepresent the research so as to promote their products amongst medical professionals.
However, it is becoming more common for manufacturers and trade associations to use corporate advocacy groups to hand-pick bias researchers to misrepresent the research for them. Not only do these reviews contribute to continued exposure of the general public to toxic products like aspartame, but some medical professionals, who do not have the time to check all references for accuracy, are duped into thinking a toxic product is safe. This section is intended to use examples from this aspartame review to demonstrate how medical professional can be duped when research is misrepresented and key research and information is omitted.

B.1. Formaldehyde Poisoning From Aspartame

An independent study in Europe demonstrated that aspartame ingestion at relatively small levels lead to the accumulation of formaldehyde adducts (bound to protein) in the liver, kidneys, brain, and other organs and tissues (Trocho 1997). This independent study was not even mentioned in this review! One of the techniques for misrepresenting research is to avoid mentioning the research altogether!

Some of the side effects of chronic formaldehyde poisoning include:

- Irreversible genetic damage from long-term, low-level exposure (Shaham 1996)
- Headaches, fatigue, chest tightness (Main 1983)
- Sleeping problems, burning skin, fatigue, chest pain, dizziness (Liu 1991)
- Headaches, fatigue, IgE-mediated sensitization (Wantke 1996)
- Musculoskeletal, gastrointestinal, and cardiovascular symptoms (Srivastava 1992)
- Headaches, tiredness (Olsen 1982)
- Headaches, dizziness, nausea, lack of concentration ability (Burdach 1980)
- Cytogenic effects of blood lymphocytes (Suruda 1993)
- Fertility (adverse effects) (Taskinen 1999)
- Cognitive adverse effects (Kilburn 2000)
- Seizures and neurobehavioral impairment (Kilburn 1994)
- Headaches, skin problems (Proietti 2002)
- Low birth weight (Maroziene 2002)
- Neurobehavioral symptoms (Kilburn 1985)
- Memory problems, equilibrium and dexterity impairment.(Kilburn 1987)

Methanol is quickly absorbed from aspartame ingestion (Davoli 1986).

Methanol is converted into formaldehyde in the body (Kavet 1990). Some of the formaldehyde is converted into formic acid and eliminated by the body (Kavet 1990). However, Trocho (1998) demonstrated that aspartame ingestion at low levels by rodents: 20 mg/kg body weight (acute dose) or 200 mg/kg body weight (chronic dose), lead to formaldehyde accumulation in the liver, brain, kidneys and other parts of the body. The formaldehyde was bound as "adducts" to proteins and DNA. Research in humans demonstrates that adduct formation can occur from formaldehyde exposure (Carraro 1997, 1999).

Another way the reviewers can convince medical professionals that chronic formaldehyde poisoning from aspartame is not a problem is to convince them that the methanol obtained from aspartame (and then converted into formaldehyde in the body) does not increase methanol levels in the blood plasma.

Table 25 on page 692 of the Magnuson et al. review purports to show several studies where plasma methanol levels did not rise except for when very large doses of aspartame were ingested (Stegink 1981, Stegink 1983, Stegink 1989). What they don't tell you, but what can be seen by reading the research is that these industry-sponsored studies used an extremely old methanol measuring technique from 1969 (Baker 1969) that would not be able to see any plasma methanol increases until it went up by 500 - 600% ! Relatively small amounts of aspartame can cause a doubling of plasma methanol levels (Davoli 1986). Legitimate researchers use plasma methanol measuring techniques that are not worthless (e.g., d'Alessandro 1994, Osterloh 1996, Cook 1991).
The fact that Magnuson et al. did not mention any of these issues proves that they are either not familiar with the research or would knowingly keep crucial information from readers.

Another way for the reviewers to convince readers that the methanol from aspartame converting into formaldehyde and accumulating is not a problem is to compare the methanol levels in aspartame to that in fruits and other products. The reviewers state: "Similarly, Butchko and Kotsonis (1991) estimated that tomato juice provides about six times as much methanol as an equivalent volume of an aspartame- sweetened beverage. .... In conclusion, the amount of methanol contributed to the diet from aspartame-containing products consumption is likely to be less than that from natural sources."

This argument put forth by the reviewers was largely addressed in an independent review in 1984 by Dr. Woodrow Monte entitled, "Aspartame: Methanol and the Public Health" (Monte 1984). The manufacturer was concerned enough about the debunking of their argument related to aspartame, methanol and fruit that they wrote a Letter to the Editor in 1985 attempting to address Dr. Monte's arguments (Sturtevant 1985). However, these reviewers avoided citing Dr. Monte's review and even the manufacturer's response.

Dr. Monte pointed out that there are "protective factors" in foods/drinks that are traditionally-ingested and contain methanol. For example, wine has high levels of methanol, but it also has high levels of ethanol. The ethanol blocks the conversion of methanol into formaldehyde, so that the methanol can safely be eliminated in the urine and breath (Leaf 1952, Liesivuori 1991, Roe 1982). Fruits also have protective factors to prevent the conversion of methanol into formaldehyde as detailed by Dr. Monte and as detailed in my heavily-referenced article entitled, "Scientific Abuse in Methanol / Formaldehyde Research Related to Aspartame," available at:
http://www.holisticmed.com/aspartame/abuse/methanol.html

By not mentioning independent, published research that is well known to the manufacturer and debunks some of the manufacturer's arguments related to aspartame, methanol and formaldehyde, these reviewers once again show either their bias and/or lack of knowledge of the scientific literature as it relates to aspartame.

The reviewers recite numerous other arguments put forth in the past by the manufacturer. All of these arguments have been addressed in detail in the scientific literature and on the following web page:
http://www.holisticmed.com/aspartame/abuse/methanol.html

B.2. Aspartame and Seizures

Section 6.9.2.4 entitled, "Effect of Aspartame on Seizures"
on page 696 cited two industry-funded, double-blind studies (Shaywitz 1994, Rowan 1995). The way these studies are presented, the reader gets the sense that a large amount of aspartame will not cause seizures in subjects who are predisposed to seizures.

What they didn't tell the readers is that nearly all of the subjects in these aspartame industry-sponsored studies were taking anti-seizure medication during the study! It is obvious that anti-seizure medication can help prevent seizures.

But Magnuson et al. presented these studies as if they had relevence to the overwhelming majority of people who do not take anti-seizure medication. Either they didn't read the studies they're reviewing or they are knowingly leaving crucial information out of their review.

In addition, the reviewers left out information that the aspartame used in these studies are, according to industry consultants, not "bioequivalent" as aspartame taken in real-world products (Stegink 1987a). The aspartame was given in slow-dissolving capsules. Giving aspartame in slow-dissolving capsules tremendously-reduces the biochemical changes that normally occur from real-world aspartame ingestion.
The methanol absorption is slowed tremendously, allowing the body to eliminate more of it before it is transformed into formaldehyde. The absorption of the excitotoxic amino acid is slowed so that the liver can prevent the sudden spike in plasma levels of this amino acid normally seen when aspartame is ingested in liquids (Stegink 1987a, 1987b).

Finally, the reviewers showed no concern that these industry studies were one day (Rowan 1995) and two weeks long (Shaywitz 1994).
Roberts (1988) looked at 551 cases and reported that reactions to aspartame appeared anywhere from immediately to more than one (1) year after initial use began. Keeping the studies short helped guarantee that there would be few, if any, adverse reactions.

B.3. Aspartame and Vulnerable Populations

On page 695 the reviewers state:

> "Concerns exist that the only studies done that show no effect of aspartame are those which use healthy adults and people used to high intakes of aspartame such as diabetics and people on weight-loss regimes (Tsakiris et al., 2006). However, the effect of acute high-dose aspartame was also evaluated in a double-blinded study of 18 patients with Parkinson's disease, as this was considered a susceptible target population for adverse effects (Karstaedt and Pincus, 1993)."

Here again, industry-sponsored studies on aspartame tend to be very short, especially in susceptible population groups. This study was less than one day long! The study purported to test whether the increase in plasma phenylalanine levels effects other measurable parameters. However, since they gave the aspartame in slow-dissolving capsules, there was only a relatively small increase in plasma phenylalanine levels.

Do these reviewers actually think that one day studies for testing a chronic poison on a vulnerable population is appropriate? Apparently so, because they had absolutely no criticism of this and other industry-sponsored studies.

B.4. Aspartame and Medium-Term Research

The Magnuson et al. review described an industry-sponsored study by Leon (1989)
where aspartame or placebo was given to healthy adults for 24 weeks:

> "The results indicated no differences between groups in body weight, vital signs

blood lipid levels, urinalysis results or incidence of complaints...."

What the reviewers didn't mention is that there were approximately 50% more adverse reactions in the aspartame group than in the placebo group. However, the researchers split the reactions in 14 smaller subcategories and they could then claim that within each tiny subcategory, there was no "statistically significant" increase in aspartame reactions.

B.5. Aspartame and Migraines / Headaches

When Magnuson et al. discuss aspartame and headaches, they were critical

of two reletively long, independent studies linking aspartame use to headaches or migraines (Koehler 1988, Van Den Eeden 1994), but had not a single criticism on an aspartame industry-sponsored study that found no link (Schiffman 1987).

Again, these reviewers had not one criticism of the industry-sponsored Schiffman (1987) study even though it was only one day long. While the Koehler (1988) study was four weeks long and the Van Den Eeden (1994) study was 14 days long. The reviewers also neglected to point out that in the Schiffman (1987) study, 77.5% of the subjects taking the placebo experienced adverse reactions during the one-day period! 45% of the subjects taking the placebo experienced headaches. This is a ridiculously high percentage of subjects reporting adverse reactions to "placebo" in a single day. The number of participants used in this study was "sufficient to ensure that a difference of 33% in the incidence rates of headache" between the aspartame and placebo control groups would be seen as statistically significant. This means that if less than 78% (45% + 33%) of the persons taking aspartame reported headache reactions, it would not be considered statistically significant.

Magnuson et al. did not even mention the critque of the Schiffman (1987) study by the Editor of the journal, Headache (Edmeads, 1988), nor did they mention other published criticisms:

"Unfortunately, their experimental design was flawed in such a way that their negative results in no way support their conclusion that 'aspartame is no more likely to produce headache than placebo.'" (Elsas 1988)

"We believe that the study of Schiffman et al had some serious flaws and did not reflect the realities of migraine due to dietary factors." .... "Persons susceptible to migraine and other vascular headaches should continue to be warned of the possible aggravating role of aspartame." (Steinmetzer 1988)

B.6. Aspartame and Aspartic Acid

On page 691 of the Magnuson et al. review, they state:

"...there have been no observed adverse effects of large doses of aspartic acid in studies with humans (see reviews: Meldrum, 1993; Institute of Medicine, 2005) or nonhuman primates (Reynolds et al., 1976, 1980)."

What they don't say is: 1) there have been no long-term studies on humans with aspartic acid; 2) the concerns related to acute effects of aspartic acid involve irreversible effects on parts of the brain as seen in animal studies. These effects cannot be seen with live human subjects as the brain cannot be dissected and examined; 3) Industry studies claiming no effect of excitotoxins such as aspartic acid on non-human primates gave brain-protected drugs to the animals and used a recroped picture from an earlier and different study to claim no effects (Olney 1993).
As described by Dr. John W. Olney:

"In addition, the 2nd report by Reynolds, Filer and colleagues (Stegink 1975), admitted for the first time that their monkeys were maintained under Sernylan (phencyclidine) anesthesia throughout the 6 hr experiment. Failure to divulge in their 1st report that their animals were anesthetized with phencyclidine is a particularly critical omission, since the use of phencyclidine thoroughly invalidates the entire study in the eyes of any knowledgable neuroscientist. Phencyclidine is one of the most potent antagonists of glutamate receptors known (Wang 1990, Olney 1990, Olney 1986). Administration of phencyclidine or its various analogs, such as MK-801, totally prevents glutamate (even very high doses of glutamate) from damaging the hypothalamus (Wang 1990). Not only does the use of phencyclidine totally invalidate the primate non-susceptibility claims of Reynolds et al., their deliberate representation that "No unusual behavior was exhibited by the infants" when they clearly were aware that their infant monkeys had actually been drugged and anesthetized, raises additional grave questions."
....
"In 1976, Reynolds et al attempted to convince the world definitively that glutamate is non- toxic for the infant primate by publishing a 3rd report (Reynolds 1976) in which new evidence is presented on an additional specie of monkey (fascicularis, a specie not documented in their first 2 reports). This report is illustrated with a brain section from a 7 day old fascicularis monkey that ingested glutamate 5 hrs earlier (Appendix, Exhibit # 2). Incredibly, the brain section used to illustrate the new finding is the same brain section used in their second report (Stegink 1975) to illustrate lack of brain damage in a 1

day old
rhesus monkey dosed with glutamate 6 hrs earlier (Appendix, Exhibit #2).
These illustrations are obviously spurious for two reasons: 1) They cannot
possibly constitute evidence from two separate monkeys or two separate species because they are one and the same photograph which has merely been cropped differently during photographic printer; 2) Regardless how this
photograph is cropped, it does not authentically document lack of glutamate
toxicity because it is selected from the caudal level of the hypothalamus which
lies outside the zone that is subject to damage by orally administered glutamate.
When Dr. Reynolds published this spurious photograph in her 3rd paper (Reynolds
1976), she had very good reason to know that it was from the wrong region of the
brain, because not only had I instructed her colleague and co-author on this matter
in 1972, but I met with Dr. Reynolds herself in 1975 and briefed her very carefully
and pointedly on both the science and the ethics of this matter. This briefing was
one year prior to the publication of her 3rd spuriously documented report."

C. Conclusion

It would be difficult to go through each section of the Magnuson et al. review in
this letter. But suffice it to say that virtually every section has research that is
misrepresented and/or crucial pieces of information are left out. This piece will
become available in several weeks in an expanded format on the Aspartame Toxicity Information Center web page available at:
http://www.holisticmed.com/aspartame/

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Aspartame Poisoning

My personal history ties in strongly with Aspartame. When starting my first company in the mid 1980's, I adhered to the philosophy of needing two years worth of startup energy. Sleeping 4 - 6hrs per night with one night per week working straight thru. Diet Dr. Pepper is how I did it. Having a strong dislike for drinking coffee, I drank Diet Dr. Pepper - containing Aspartame. Once the money started to come in, psychologically it only was easier to continue abusing to my body by drinking it; even though I have never enjoyed soda.

With 20/20 hindsight, *"If I had only known"*, but, if *"they"* had only told us. But money buys a lot of friends, and Aspartame production makes a lot of money. I recently bought a bottle to look at the specification listing - not to drink it. Sure enough it still contains Aspartame, and the listing on the bottle - "Warning, contents under pressure . . ." the usual.

Any manmade substance, not occurring naturally in the food chain has contraindications. The question is how severe, and on how many of us?

Drug/chemical/pharmaceutical/food conglomerates have deep pockets, and they paid me well, very well, when doing business with them during my second company in programming/consulting, and software, but not enough for this. Our lives are worth more than stock dividends and market share profits. Even though class action suits are starting in New York and New Jersey, a brain tumor is required to participate as a plaintiff.

Survival of the fittest is the same with any species; who will remain?

With the artificial sweetener Aspartame, we're beginning to see the iceberg that sunk the Titanic. Over 80% of ALL complaints to the FDA are regarding Aspartame. Whether manifesting as MS, Lupus, or Fibromylagia, to name a few – try eating organic and see how much better you feel & live.

But a little poison never hurt anyone, right?

The blood-brain barrier at the base of the brain is there to protect us. Violating it, whether by the excitotoxin Aspartame, or the street drug Ecstasy that puts holes in the brain creating an early onset of Alzheimer's; – any foreign substance that crosses it is a problem.

If you know anyone having MS, Lupus, or Fibromylagia, & you probably do; if you're concerned about your weight, and you probably are; if you're from the U.S.A. - the fattest country on earth; those of us who have been handicapped by it, and the whole population unknowingly poisoned by it; the next right thing is needed, banning *Aspartame from our foods Now.*