THE STORY OF SUGAR AND FAKE SUGAR MADE SIMPLE

Any damn fool knows what sugar is. Thus, it is necessary for me to write an essay on it. Away we go. All green plants produce sugar. Plants are then eaten by other critters for energy. Most of the "refined" sugar that humans use comes from two plants, sugarcane and sugar beets. The main sugar from these two plants is called sucrose.

Sucrose, also called "white sugar," is the sugar that you probably keep in your sugar bowl . . . for looks and to impress and pacify your mother. Other common sources of sugar found in nature are maple syrup, honey, fruit, and milk. The sugar in milk is called "lactose." Guess which mammal has the highest percentage of lactose in their milk? Guess the only animal that continues to create lactase after weaning. Yup . . . humans. Maybe that's why we have such a sweet tooth!

HISTORY OF SUGARCANE

Sugarcane was grown in the South Pacific Islands and India more than 8,000 years ago. Alexander the Great (unless you are one of the innocent people he slaughtered, whereupon you call him Alexander the @&!!%#$) mentions sugarcane on a trip through India in 325 B.C. The cultivation and refining of sugar did not reach Europe until 636 A.D. During the 1400s, Europeans planted sugarcane in Africa and Brazil. The great Christian missionary, humanitarian, and servant of God—Christopher Columbus, who brought the teachings of gentle Jesus to the heathen natives—also brought sugarcane cuttings to the Caribbean in 1493.

Because the heathens led idle, stress-free lives, ran around naked like savages, and lived under the illusion that they were already in Heaven, wise Columbus saw the necessity of leading them toward the strait and narrow by providing them employment in the sugarcane fields. This gave them the opportunity to learn humility and respect for higher life forms. These fortunate first slaves worked the sugarcane fields to satisfy the Europeans' ravenous sweet tooth, and to make rum. You know the rest of the story. Jesuit missionaries brought sugarcane to Louisiana in 1751, perhaps again to create a Godly environment for the local natives; and the first sugar mill in the U.S. was built in New Orleans shortly after.

History of Sugar Beets

The ancient people of Babylonia, Egypt, and Greece all grew sugar beets. In 1744, a German chemist discovered the similarities between sugarcane and sugar beets, and went to work to refine their sugars. The Europeans preferred cane sugar, but with the advent of the Napoleonic wars and the resulting importation chaos slowing down the importation of cane sugar, Napoleon started ordering farmers to grow sugar beets. *Sacré bleu!* Because Napoleon was a very short man, he had to impress Josephine somehow, so he gave her chocolates—thus the necessity of growing sugar beets. (This fact is not necessarily historically accurate.) The first beet sugar refinery in the U.S. was established in the Oakland area in 1838. Currently about 40% of the world's sugar comes from sugar beets. (Because sugar beets are soon to be GMOed, stick with organic cane sugar).

Sugars in General

There are hundreds of sugars on this planet. When you find the suffix "ose" on a word, it usually means sugar. Thus, as people call me "verbose," I deduce they are referring to my sweetness. Lactose, maltose, glucose, fructose, galactose, etc. are all sugars. As we learned, common white sugar is sucrose. Sucrose is a "di-saccharide," meaning two sugars. A "mono-saccharide" is one sugar. The "two-sugared" sucrose breaks down equally into the "one-sugared" glucose and fructose. Glucose is the most important carbohydrate in our blood, and is called "blood sugar." It is the main food that all our body cells use for food and energy. Fructose is a main sugar found in fruits and vegetables.

Raw, unprocessed sugarcane has around sixty-five main food ingredients, including minerals and vitamins (also including five of the B complex), trace elements, and even unsaturated fatty acids. It also contains the four enzymes necessary for us to break it down and digest it well. Raw sugarcane is actually a reasonably nutritious food. When raw sugar crystals are being processed, they initially have a thin coating of syrup-like stuff on them. The crystals are spun in a centrifuge, heated to a melting point, then filtered and de-colorized with animal bone charcoal to make them white. Then, more boiling makes even more concentrated crystallization. The two products left after all this processing are pure white sugar crystals—about 98%—now called "raw sugar," and the 2% residual syrup (still 35% sucrose), now called "Blackstrap Molasses."

Whereas the original raw unprocessed cane sugar contained many valuable nutrients, the new refined white sugar contains almost zero nutrients. The already highly processed sugar crystals are then refined even more, and the end product is 99% pure sucrose, or "white sugar," with basically no nutritional value, and indeed, a negative food value. (For example, one molecule of white sugar requires about 35 molecules of magnesium to break it down.)

Molasses still contains a few minor nutrients. "Brown sugar" is created when some molasses is added back to the white sugar. Thus, there is a teeny tiny bit more nutrition in brown sugar than white. Big deal. Brown sugar is graded as "Klein Raw" if 5% molasses is added back, "Light Brown" if 12% is added back, and "Dark Brown" if 13% is added back.

The distillation of molasses creates ethyl alcohol, which is mainly used in industry and by alcoholics who want to become blind idiots. Molasses can also be distilled into Rum, which the first slaves and their children in the Americas were painfully aware of. One little cause of the War of 1812 with England was a tax on molasses, which quite bothered the rum makers in New England. They did not want to have to pay more in order to create alcoholics and make certain women desirable.

Corn Syrup / Corn Sweeteners

The ratio we eat of corn sweeteners and sucrose (white sugar) these days is about 50 / 50. The two common corn sweeteners are corn syrup and "high-fructose" corn syrup. Corn syrup is a thick, slightly sweet, liquid made from processing cornstarch and water. It was originally called "glucose." However, as of 1902, people thought of it as "glue," so it was renamed "corn syrup". Corn syrup gives candy its smooth texture, and it also attracts and preserves moisture, which helps prevent baked goods from becoming stale. It is composed of two sugars, maltose and glucose, plus some sticky stuff called dextrin. To make even sweeter syrup, manufacturers add another enzyme, which turns some of the glucose into fructose. Fructose is commonly called "fruit sugar."

Corn syrup, also called "dextrose," goes through the intestines in fifteen minutes, unlike other sugars that take up to four hours to digest. For this reason it is used for IVs in hospitals. Corn syrup is added to dried fruit to make the fruit weigh more—an advertised pound of dried apricots may not really be a pound of dried apricots—and is used as filler in many other processed foods. Corn syrup has no obvious sweet taste, so people don't know they are eating it. Due to the power and corruption of the big food lobbies in the U.S., corn syrup does not have to be included in the list of ingredients of foods. Thus, even innocent people, like Diane, can eat it and not know.

High-Fructose Corn Syrup

Further chemical processing of the syrup, including adding genetically modified products at two stages, produces "High-Fructose" Corn Syrup (HFCS). This is the most dangerous sugar and the second reason for this essay. (The first is Aspartame.) Food manufacturers prefer HFCS because it costs far less to make and is sweeter, but is not higher in calories. HFCS can be tweaked chemically to contain equal amounts of glucose and fructose, or really tweaked to bump the fructose up to 80% with only 20% glucose. Fruit sugar from fruit, such as apples, is 50% fructose and 50% glucose. Thus, with almost twice the amount of fructose, HFCS delivers a double danger compared to simple white sugar. Most commercial fruit juices have HFCS added to them. Natural fruit contains fiber and minerals that slow the breakdown of its fructose in the liver, but the fructose in HFCS is absorbed very quickly into the liver creating hazards.

In 1980, the average person ate 39 pounds of fructose and 84 pounds of sucrose. In 1994, the average person ate 83 pounds of fructose and 66 pounds of sucrose, providing almost twenty percent of a person's total daily calories. In 1997 the average American ate 154 pounds of white sugar and high-fructose corn syrup. A mere 53 teaspoons per day. In 1997 the average American also guzzled 41 gallons of soda pop. In 2004, 54 gallons of soda pop guzzled per person. 54 gallons X 16 is 324 cups of

soda-divided by 365 days is 2 and a half cups of soda per day for every man woman child and newborn baby in the U.S.! Who knows how much more is drunk here in 2008—4 years later? Why are there 325,000 deaths per year in the U.S. from obesity? It must be genetic. "Raw whole milk or fresh apple juice, anyone?" "No, thanks." Today, approximately 1 / 3 of our total calories come from sugars, with the largest portion being fructose.

HFCS is used in everything from bread to pasta sauce to bacon to beer, as well as many so called "health products," like protein bars and "natural" sodas. In the past, fructose was considered better for diabetics than glucose, as the body absorbed it forty percent slower than glucose, and thus, slowed the rise of blood sugar. However, the new research shows that fructose actually causes more disease than glucose, as glucose is metabolized in every cell of the body, whereas, fructose is metabolized only in the liver. "High" fructose is 10 times harder on your liver than glucose. Thus, the livers of people eating large amounts of fructose develop fatty deposits as well as cirrhosis (hardening and swelling), similar to the symptoms of advanced alcoholism. The thin-skinned among these people become "gravitationally challenged." The strong and brave get "fat."

Pure fructose contains no vitamins, no minerals, no trace elements, and no enzymes. It is a dead food. It thus robs your body of your own nutrients (particularly B vitamins and calcium), in order to make itself recognizable and digestible in your body. While naturally occurring sugars, as well as sucrose, contain fructose, the fructose is bound to other sugars, so is made safe. However, the extreme processing of high-fructose corn syrup creates a high amount of free or "unbound" fructose. This "free fructose" interferes with your body's use of key minerals, particularly magnesium, copper, zinc, and chromium. Fructose creates greater urinary concentrations of phosphorus and magnesium and lowered urinary pH (more acid) compared to glucose. More acidity means more decalcification and bone demineralization.

HFCS is also responsible for high abnormal blood cholesterol and the creation of blood clots. It inhibits the action of white blood cells so they become unable to defend your body against foreign invaders like cancer cells. HFCS destroys the quality of protein in your body as it inhibits the uptake and breakdown of amino acids thus, making protein toxic and hard to digest. HFCS promotes the "Maillard" reaction at a seven times greater rate than glucose (look it up)—between proteins and fructose—thus playing a role in early "aging," and creating clinical complications in diabetes.

High-fructose corn syrup reduces the affinity of insulin for its receptor cells, which is the hallmark of type-2 diabetes. This is the first step for glucose to enter a cell, be broken down, and digested. As a result of this breakdown, the body needs to pump out way more insulin from the pancreas to handle the same amount of glucose. Good morning Diabetes and Obesity, my name is High-Fructose Corn Syrup.

Consumption of fructose also creates a significant increase in the concentration of uric acid. Uric acid is one of the strong indicators of heart disease. Consumption of glucose, on the other hand, creates no increase in uric acid. Fructose also results in increased blood lactic acid (which makes you tired and anxious), especially in people with pre-existing conditions such as diabetes, postoperative stress, or uremia. Extreme elevations of lactic acid cause metabolic acidosis, and can result in death.

Fructose is converted to fatty acids in the liver at a much faster rate than glucose. When consumed in excess of dietary glucose, the liver cannot convert all the excess fructose in the system, which may be malabsorbed. The fructose that escapes digestion becomes a problem. Malabsorption of even small amounts of fructose creates significant gastrointestinal distress, especially in people with functional bowel disease. Fructose interacts with oral contraceptives and elevates insulin levels in women on "the pill."

There is significant evidence that the fructose portion of sucrose alters intercellular metabolism (the ways that cells get their food in and out), which speeds up the aging process through oxidative damage. Collagen tissue is the basis for connective tissue in the body—muscles, ligaments, cartilage, fascia, periosteum, artery lining, and skin—which starts to develop undesirable cross-linkage (basically scar tissue) after fructose ingestion. Cross linkage of collagen is a main determinant of aging. Thus, high-fructose makes you prematurely old and wrinkled.

Quite unlike glucose, fructose is metabolized (broken down) by the liver. Glucose is broken down by all cells in the body with the help of insulin from the pancreas. Thus, fructose does not cause insulin to be released from the pancreas, as it normally is with other sugars. Fructose digestion strains the liver, as without insulin from the pancreas, it is now on its own. It can't get help from the pancreas. Fructose converts to fat faster than any other sugar on the planet. Obesity and premature aging, anyone? Yes, I'll take three. Burp.

Fructose also raises serum triglycerides significantly and is extremely hard to digest. For complete internal conversion of fructose into glucose and acetates, it must steal and deplete the ATP energy stores from your liver. Fructose inhibits copper metabolism—especially dangerous in people who already have low copper from bad diet. Low copper leads to defective connective tissue, bone fragility, infertility, heart problems like arrhythmia, and heart attacks, high bad cholesterol, and inability to control blood sugar levels. A major reason people gain lots of weight and become huge little piggies by eating fructose is that it does not trigger the release of insulin and leptin. These are two hormones that regulate sugar breakdown and general energy expenditure.

The people most sensitive to fructose include hypertensive people, hyperinsulinemic people, hypertriglyceridemic people, non-insulin dependent diabetic people, postmenopausal women, and people with functional bowel disease. Yes, we know the high-fructose "pushers" tell us that organically grown fruit contains fructose, so that logically industrial-processed fructose is perfectly safe. However, this is misleading, because "whole" fruit already contains the chemistry needed to break it down in the body. Commercially-altered fruit products, such as fruit juices and Gatorade (made by Quaker Oats International, folks who care about your health), should be avoided, because the enzymes and nutrients in fresh fruits needed to break them down for digestion have been destroyed, leading to your demineralization.

Conclusion: The addition of massive amounts of high-fructose corn syrup to most commercial foods is responsible for a great deal of liver breakdown, obesity, diabetes, and other illness in this society, and should be avoided. If you, the consumers, lead, industry will follow. If the people demand healthful food, Monsanto and Coca Cola will start making it. Start now!

How Much Sugar Do We Eat?

In 1700, the average refined sugar consumption was 4 pounds a year or a little over 1 / 10 of an ounce a day; in 1900, 10 pounds; in 1960, 110 pounds; in 1977, 129 pounds; in 1994, 149 pounds; in 1997, 154 pounds; now, in 2007, undoubtedly much more as people become more feeble. This basically means one-half pound of sugar (eight ounces—53 teaspoons!) every day for every person in the U.S. In order to balance out the babies and non-refined sugar-eating peoples, it appears that some people have to eat around 600 pounds a year.

Eight ounces of water is the weight of one cup of water. I looked around my house for refined granulated white sugar and found some under my son Bo's bed, cleverly hidden under a bar of soap. I measured out 8 ounces into a measuring cup and was amazed to find out that the volume of 8 ounces of sugar takes up the volume of one-and-one-half cups—the volume of a can of coke. The average person eats this amount—one coke can filled up with sugar every day . . . maybe forever. The "bad boy"—high-fructose corn syrup—is the primary sweetener used in soft drinks, including the so-called natural sodas.

Back in 1997, the average U.S. citizen drank 41 gallons of soda pop a year. The average teenage boy now drinks three cans of soda pop at school a day. A can of soda averages an ounce of sugar. Ten percent of teenage boys drink seven or more cans a day. Girls, being a third smarter, drink about a third less. 88% of U.S. high schools and 15% of elementary schools have soda pop machines for students. So, why are there 21 million diabetics—six million of them taking insulin shots every single day—in the U.S.? Why is diabetes doubling every ten years in the United States? Why are almost one-third of U.S. people fat—particularly children? Quick! Let's all send money to the American Diabetic Association so their corporate "boys" can quickly determine if the cause of sugar diabetes and obesity is genetic, or a virus. Diet? Not worth the research if the solution can't be patented and marketed.

No natural food has sugar in the absence of vitamins and minerals. When you eat raw honey, an apple, or banana, or pear, or watermelon, or carrot, or turnip, it is true that you are eating sugar. However, natural foods are loaded with vitamins and minerals, trace elements, enzymes, bulk, and roughage fiber to provide support to break the sugar down. Thus, "real" fruit sugars present no danger to most people, except those who are extremely sick. The healthy body knows how to digest and assimilate natural organic fruits and vegetables, and that's that. Go eat a real organic apple and a turnip, and say nah nah nah nah nah.

You might be amazed at what percentages of common products back in 1979—including toothpaste—were refined white sugar and processed fructose. These percentages do not include the current amount of sucrose and high-fructose corn syrup in these products.

Listerine for adults 68%
Wishbone Russian dressing 30%
Hershey bar 51%
Quaker 100% natural cereal 24%
Skippy peanut butter 9%
Dannon blueberry yogurt 13%
Heinz tomato ketchup 29%
Coffee Mate 65%
Chicken Shake and Bake 51%
Ritz crackers 12%
Del Monte kernel corn 10%
Hamburger Helper 23%

Cool Whip 21%
Coca Cola, only 9%!
Cigars 20%
Toothpaste 12%
Cherry Jell-O 82%
Cigarettes 5%
Pipe tobacco 40%
(usually from molasses)

Aspartame / NutraSweet, Splenda, Etc.

For the past several years, the gullible and quite malleable television-watching public has been successfully conned into eating fake "non-nutritive" sweeteners in their soft drinks, medicines, and chewing gums, etc., instead of good old-fashioned white sugar. The most widely used and the most deadly of the five fake sugars allowed by the FDA is "Aspartame." Over 54% of adults are now consuming Aspartame. Discovered in 1965, Aspartame is 180 times sweeter than white sugar, and is found in more than 6000 foods, personal care products, and drugs. 80% of all Aspartame is used in the United States, and 70% of that is used for soft drinks. It is sold under various names, the most common being NutraSweet, Equal, and Miwon.

Aspartame was originally developed by the Searle Pharmaceutical Company, and was soon called "NutraSweet." At the time, our faithful patriot of corporate America and current secretary of defense, Donald Rumsfeld, was the head of Searle Drugs. Though Searle's own studies showed the dangers of Aspartame, as well as did a huge suppressed FDA document called the Bressler Report, Donald Rumsfeld and his little gravy-sucking friend, Senator Orrin Hatch of Utah (who helps control Twin Lab, a supplement company that uses Aspartame in its products), leaned on Ronald Reagan to help slide Aspartame through the back door of an unfriendly FDA.

As soon as the FDA, whose honest scientists were strongly opposed to it, approved Aspartame, the head of the FDA, Arthur Hayes Jr., left his job to go to work for the Searle Drug Company in their public relations department. Surprise! Surprise! The Monsanto Company, on its way to controlling and destroying the planet, bought NutraSweet in 1985. In the process, Donald Rumsfeld made millions in profits. Remember, if you took the ten richest men in the world, sat them around a table, and had them put all their money up front on the table, and then divided it equally, there would not be enough to go around. The whole corrupt story of legalization and marketing of Aspartame is quite amazing, but I must restrain myself in case you are already getting sleepy. If you are still awake, use the references at the end of this essay to look up information. At any rate, Aspartame is far more toxic than the sucrose it's meant to replace.

Certain problems with Aspartame are summarized in my favorite nutrition book *Nourishing Traditions* by Sally Fallon. "Aspartame is a neurotoxic substance that is associated with numerous health problems including: headaches, dizziness, visual impairment, severe muscle aches, numbing of extremities, pancreatitis, high blood pressure, retinal hemorrhaging, seizures, and depression, to name a few. It is suspected of causing birth defects and chemical disruptions in the brain."

Well, that's just scratching the surface of Aspartame side effects, but it's a good start. Even at low levels, Aspartame causes adverse changes in the Pituitary gland, the gland that controls all the other glands of the body. When Aspartame is broken down, it breaks into the amino acids, phenylalanine and aspartic acid, plus methanol.

Methanol, also called "wood alcohol," is a known poison. If you are a hillbilly and are still coherent, you know what wood alcohol is. Lots of blind bums on skid row in the old days were there because of methanol. Methanol breaks down into formaldehyde, a deadly nerve poison, which we will discuss as we go.

Though Monsanto will tell you that methanol is also found in fruit juices, to distract you, they will not tell you that the amount found in a soft drink is 100 to 1000 times higher than that found in fruit juices, and as you remember, "unprocessed" organic fruit juices have antioxidant and other nutrients that lesson the toxic effects of methanol.

The Environmental Protection Agency (EPA) defines the safe level of methanol to be 7.8 milligrams per day. One liter of a beverage sweetened with Aspartame contains about 56 milligrams of methanol. One can of diet soda is already eight times more toxic than the FDA considers dangerous.

Methanol (wood alcohol) and its consequent formaldehyde cause swelling of the optic nerve and degeneration of ganglion cells in the retina. The optic nerve and retina need amazing amounts of nutrients (thus, lots of blood), and have unique metabolic requirements regarding immediate elimination of toxic wastes. Thus, they are early victims of neurotoxins, such as methanol and formaldehyde, which harden cells, thus destroying the cells' ability to eat and poop. Aspartame causes eye pain, decreased vision and dry eyes, along with difficulty in using contact lenses, vision loss in one or both eyes, black spots, flashing, tunnel vision, and unexplained retinal detachment and bleeding.

Many of the "dry eye" complaints compiled were coupled with severe depression, marked memory loss and / or mental confusion, severe joint pain, and dry mouth. (If you want to play doctor, the diagnostic "lipstick on teeth" sign for dry mouth consists of lipstick adhering to the upper front teeth.) The most frequent complaints were from females averaging 50 years old. Conscientious eye surgeons who read the scientific "non-factory" literature on Aspartame are now deferring treatment and surgery of immature cataract, macular degeneration, impaired vision in diabetics, and multiple sclerosis, based on eye and neurological tests on Aspartame users for one to two months. Many times patients improve after several weeks and avoid medical procedures such as surgery, simply by removing Aspartame with its excitotoxins, from their diet.

Aspartame is now strongly linked with Parkinson's disease, and it's interesting to note that the young short actor, Michael J. Fox, was the national spokesman for Diet Pepsi, and under his contract, kept cases of it around his movie sets to drink. Though he was quite young, he developed Parkinson's disease. Who knows why? Alzheimer's disease and Gulf War Syndrome are also associated with Aspartame, along with "experimental" vaccinations. (Why is it of all the countries involved in Iraq, the U.S. is the *only* country with Gulf War Syndrome?) The suspected difference was "experimental" vaccinations and Aspartame.

The troops of Desert Storm were "treated" to huge amounts of Aspartame drinks, which had been heated to over 86 degrees in the desert sun. Heat releases the formaldehyde from the methanol, and many of the troops' symptoms were identical to formaldehyde poisoning. Aspartame's breakdown products, or metabolites, are even scarier than its components. When exposed to heat or long storage, the Phenylalanine component breaks down into diketopiperazine (DKP), a known carcinogen. Thus, even

if kept cool, it becomes poison if stored. However, Mr. Rumsfeld knows this is not a problem, just as Monsanto knew that Agent Orange in Vietnam was harmless to humans.

At cold temperatures, methanol spontaneously breaks down into formaldehyde, a very toxic toxin. Formaldehyde accumulates within the cells, and reacts with cellular proteins, such as enzymes and DNA, to create cancer and other diseases. Long-term users of Aspartame are thus, cruising for a bruising. Even the FDA recommends that pregnant women, nursing mothers, and people with weak livers should avoid Aspartame.

As of 1995, over 75% of all adverse food reactions reported to the FDA were due to Aspartame. Now maybe more. Aspartame, like Monosodium Glutamate (MSG), is a strong neurotoxin, and the bottom line is that neurotoxins overexcite the nerve cells and harden them. Think of this hardening / scar tissue as building callus on a guitar finger, or clogging up a strainer with glue. Aspartame wrecks the flexibility of nerve cells and, because nutrients cannot penetrate hardened cell walls, Aspartame ends up actually killing them. Hence, early senility results in loss of memory, and chronic fatigue, etc., as glucose cannot enter into the "hardened" cell. Thus, the cell dies. Pushing glucose and other nutrients into a hardened cell is like gardening in hard dirt.

One main problem resulting from this scenario is that the pancreas must produce more insulin to push the glucose into the hardened cells. Thus, Aspartame use encourages diabetes as the pancreas wears out. The toxic breakdown products of Aspartame, such as formaldehyde, methanol, and formic acid build up in peripheral nerves as well as in the central nervous system. Thus, diabetics who already have peripheral neuropathies with numbness and atrophy, etc., get worse faster.

Warning: Do not read the next couple of paragraphs unless you are a real doctor.

It is now known that the cause for the destruction of the myelin sheathing from Aspartame lesions in the nervous system is over-activation of the microglia in the region of the myelin. An enzyme that converts glutamine to glutamate, called glutaminase, increases tremendously, thereby greatly increasing excitotoxicity. The aspartate and methanol in Aspartame create tremendous excitement in the microglia. Mercury also activates microglia, even in sub-toxic doses. (Maybe that is related to why dentists had the second-highest suicide rate a few years ago.) The secret to treatment must involve calming down the microglia. Thus, excitotoxins should be removed from the diet.

When was the last time your doctor advised you on diet? The aspartic acid in Aspartame is a known excitotoxin, and in your body is converted to glutamic acid, an even more powerful excitotoxin. Experimentally, the same widespread brain lesions produced by MSG exposure can be produced by high dose Aspartame. Studies of Aspartame on animals showed a 47 times higher incidence of brain tumors. A 1997 study found that macrophages (our heavy-duty cancer-fighting white blood cells), when exposed to Aspartame, produce a 300% increase in arachidonic acid metabolites, which presents a real problem to patients having autoimmune disorders such as lupus, multiple sclerosis, and rheumatoid arthritis.

Okay. Non-doctors can start reading again. With the public concern over childhood obesity and diabetes, few people are being told of the overwhelming evidence that early exposure to excitotoxins, as in Aspartame, consistently produce gross obesity and insulin-resistant diabetes, just as we are seeing in our youth. The next paragraph helps explain a bit of how we are not being told.

In 1996, Ralph G. Walton, M.D., Chairman of the Center for Behavioral Medicine, analyzed the main 164 studies done on Aspartame. 74 of the studies were sponsored by the Aspartame industry, and 90 were funded independently. Of the 90 "independent" studies, 83 (92%) found one or more health problems with Aspartame. Amazingly, all—100%—of the 74 studies funded with Aspartame money claimed that no problems were found with Aspartame. The FDA sponsored six of the seven studies that did not find problems. Given the number of FDA officials who went to work for the Aspartame industry (mainly Monsanto) immediately following FDA approval of Aspartame (including the former FDA Commissioner), most intelligent people consider these studies to be equivalent to "industry-sponsored research."

This might remind you of tobacco industry research, in which the scientific prostitutes find tobacco safe, and even healthful, whereas the independent tobacco research shows all kinds of problems—for example, death. People with a bias can make statistics bend in any direction they prefer, just like rubber.

Indeed, I had an English teacher in college who did statistics for the army. He told us that the army would bring him the results they wanted and then direct him to create the study to achieve those results. The army would shoot the arrow and then tell him to create the target. Bulls Eye! As usual. This is quite the case in cholesterol research done by the drug companies. Remember this little quote when someone quotes you a statistic: "Statistics are like bikinis. What they reveal is interesting, but what they conceal is essential!"

The Aspartame-sponsored research is what you read about in the corporate media, as the independent research—like independent news on Iraq—is essentially censored and frequently banned. (All the more reason to listen to KVMR 89.5 and National Public Radio 88.9 FM) The Aspartame industry-sponsored studies have severe design deficiencies built into them to guarantee the desired outcome. These design deficiencies may not be readily apparent to the innocent inexperienced scientist—especially a scientist who is not expecting such incredibly disguised diabolical "professional" deceit.

What About Saccharin?

Saccharin was discovered in 1879, and was used until 1917 as an antiseptic and a food preservative. In 1901, a sharp young dude named John F. Queeny recognized the potential of saccharin and formed his own corporation to make his own product. He called his corporation Monsanto. Monsanto went on to become the main enemy of organic agriculture and the health of nations. In 1903, Monsanto shipped saccharin to a new little-known company in Georgia named Coca-Cola. Thus, the cocaine in coke entered into even worse company, and Monsanto got rich.

In 1958, Sweet'n Low was developed, with cyclamate mixed in to lessen the metallic taste of saccharin. The current Sweet'n Low does not contain the cyclamate, because the cancer it caused was so obvious that even the "bought" portion of the FDA

couldn't ignore it any longer. After many years of debate, saccharin is still legal, though it is labeled by the FDA as an "Anticipated Carcinogen." If you are a gambler with no self-respect, keep eating it.

Sucralose, Also Known as "Splenda"

Splenda is 600 times sweeter than sucrose, and is probably the least "independently-studied" of the phony sugars. Thus, many doctors who can't think outside the industrial medical box continue to prescribe it over Aspartame rather than teach people how to eat actual foods. One of the few human studies using Splenda on diabetics made the FDA conclude that after eating Splenda, the "increases in glycosolation in hemoglobin imply lessening of controls in diabetes." In other words, it makes diabetics more unstable. Other animal studies showed Splenda use led to up to 40% shrinkage of the thymus gland, enlargement of the liver and kidneys, atrophy of lymph follicles in the spleen and thymus, increase in cecal weight, reduced bodily growth weight, decreased red blood cell count, hyperplasia of the pelvis, longer pregnancies, decreased fetal body and placental weights, and diarrhea. In the FDA's final report, Splenda was related to lymph cancer. But hey, it's safer than Aspartame.

One of the main health concerns is that Splenda is a "chlorinated" molecule. Chlorinated molecules are used as the basis for pesticides, such as DDT, and tend to accumulate in body tissues. Less well known is that Splenda is also a chlorinated hydrocarbon, which means our livers break it down into even more toxic molecules. Johnson & Johnson claims that Splenda passes right through your body, and is thus harmless. They make the stuff, so they should have no reason to lie, right? However, the FDA says about 27% of Splenda is absorbed, and the Japanese health services say about 40% is absorbed into the body. Furthermore, 20-30% of Splenda is metabolized, meaning that it is further broken down.

To further increase any problems, the absorbed Splenda with its poisonous chlorine is concentrated in the liver, kidney, and gastrointestinal tract. The FDA also admits that 2% of Splenda has various impurities, such as heavy metals, arsenic, methanol (our old friend, wood alcohol), and a whole lot of tedious chemical stuff with really long names. Avoid it and eat real foods if you are brave and strong and want to stay that way. Tell Monsanto to stick Splenda where the sun don't shine.

Phony Toxic Imitation Sugars and Weight Gain

Back in 1986, the American Cancer Society documented the fact that persons using artificial sweeteners gain more weight than those who avoid them.

Aspartame and other phony sweeteners actually end up increasing your appetite, whereupon, you eat more food. Your quasi-logical mind tells you that since you are drinking a diet drink, that you are entitled to eat more pizza, donuts, and Twinkies. Normally, when you eat a significant quantity of carbohydrates, your serotonin levels rise in your brain. Serotonin makes you feel good, and makes you feel relaxed after a meal. When you eat Aspartame along with carbohydrates, like pizza or a sandwich, Aspartame actually blocks your manufacture of serotonin. Thus, your feeling of having had enough food and feeling good never happens. You eat more and more food, and

maybe more Aspartame, and your hunger cycle continues. You get fatter and fatter and dumber and dumber as your brain hardens and you become a loser. Whooops, I forgot! There are no more losers. We are now merely "winning impaired" people.

A sweet taste (Aspartame is 200 times sweeter than white sugar) signals your body to store carbohydrates and fats. The result of this "food-hiding" causes your body to think it needs more food. Thus, you crave more. A good percentage of the fat people—whooopsie, "gravitationally challenged" people—you see are holding on to a diet drink with a death grip, as their hunger won't go away.

A study by Sharon Fowler at the University of Texas reported at the annual meeting of the American Diabetic association last year, found amazing things about diet sodas compared to sugared sodas. Fowler stated, "What didn't surprise us was that total soft drinks use was linked to obesity and overweight. What did surprise us was that the risks of obesity for people doing "diet" soft drinks only were even higher!" The study showed there was a 41% increase in obesity risk for every can or bottle of diet soft drink a person consumes each day. For "regular" soft-drink drinkers, the risk factors for obesity are as follows:

26% for up to ½ can each day	30.4% for ½ to 1 can a day
32.8% for 1 to 2 cans a day	47.2% for over 2 cans a day

For diet soft-drinkers, the obesity risks went up:

36.5% for up to one can a day	37.5% for ½ to 1 can a day
54.5% for 1 to 2 cans a day	57.1% for more than 2 cans a day

A report "for immediate release" dated July 27, 2005, from the Center for Science in the Public Interest, recommended the FDA immediately ban the artificial sweetener Aspartame in light of a new study published in the EUROPEAN JOURNAL OF ONCOLOGY, showing a statistically significant increase in lymphomas and leukemia. The authors of the study called for "urgent re-examination of permissible exposure levels of Aspartame in both foods and beverages, especially to protect children." Think about it.

CONCLUSION

How did people in history, before refined sugar, get sugar? How did they build sophisticated civilizations without Coke and Pepsi? They ate fruits and vegetables, raw dairy products, and whole organic foods for their sugar; all without refined and artificial sugar. Unimaginable but true. There are many healthy alternatives to refined sugars and artificial sweeteners. They include: maple syrup, dehydrated organic sugarcane, date sugar, raw unfiltered honey, and to a certain extent, molasses. Stevia is a new sweetener made from a Paraguayan herb, which, so far as I know, has no known side effects. However, it is "extracted, processed, and refined," so I suspect the natural leaf itself would be better if you care to grow your own like my daughter, Heather. However, my guess is that since Searle Drug and Monsanto Corporation are both pushing very hard on the FDA to ban Stevia as an additive, that Stevia is most likely an excellent product.

Natural sugars are "foods," and have been eaten for hundreds and thousands of years. You do not have to be a guinea pig and a patsy for big sleazy corporations and eat

their poison synthetic foods until your body blows up. Go eat some real unprocessed food. You can do it—you can, you can. It really is okay. Ask Diane.

Recommendations: The best sugars to eat are organic maple syrup, evaporated organic cane juice, organic unprocessed honey, and of course, organic whole milk and fruit. Stevia seems okay so far.

Okay, sort of, on certain days: Sucrose / white sugar in small quantities, and saccharin in smaller quantities.

Avoid Completely: High-fructose corn syrup, aspartame / NutraSweet / Sweet'n Low, and Splenda / Saccralose. Supposedly "natural" Agave sugar - another a health hoax from Mexico - is basically the equivalent of high-fructose corn syrup, and about as "natural" as Styrofoam.

A good website to learn more about this excitotoxin stuff is www.mercola.com. The best book I know of about Aspartame and other nerve poisons is called *Excitotoxins: The Taste That Kills* by the renowned Brain Surgeon, Russell L. Blaylock, M.D. Any book or article by him is a must-read (see the bibliography at the end of this section of the book and check out his website).