"The taste of sweetness, whereof a little more than a little is by much too much." – Henry IV, Part I

There's no doubt that Americans are addicted to sugar. We consume an average of 150 lbs. per person per year. (Appleton, p.10) For many of us, that means we eat our own weight in sugar every year! So it might be helpful to find out what that means – what sugar really is, what food value it has, and what problems it causes.

The sugar industry is big: $100 billion per year. As with any other billion dollar business, there's bound to be a ton of information that will support such an empire anywhere you look – the media, bookstores, advertising, etc. Boats like this don't like to be rocked.

On the other side is a group claiming that white sugar is poison, a harmful drug, barely differing from cocaine, etc. Some claims are true; others are unreferenced opinion, often bordering on hysteria. For our purposes, we'll focus on what we really can verify about sugar, and hopefully avoid the errors of disinformation on both sides of the fence.

**WHAT IS SUGAR?**

That's easy – it's that white stuff in the sugar bowl. Refined white cane sugar is only one type, however. There's also brown sugar, raw sugar, fruit sugar, corn sugar, milk sugar, beet sugar, alcohol, monosaccharides, disaccharides and polysaccharides. All these are also sugar.

Start with white sugar. It is made by refining sugar cane, a process involving many chemicals. Or from beets, whose refinement also involves synthetic chemicals, and charcoal. The big problem is that the finished product contains none of the nutrients, vitamins, or minerals of the original plant. White sugar is a simple carbohydrate, which means a fractionated, artificial, devitalized by-product of the original plant. The original plant was a complex carbohydrate, which means it contained all the properties of a whole food: vitamins, minerals, enzymes.

Refined sugar from beets and cane is sucrose. Up to the mid 1970s, sucrose was the primary sugar consumed by Americans. That changed when manufacturers discovered a cheaper source of refined sugar: corn. A process was evolved that could change the natural fructose in corn to glucose, and then by adding synthetic chemicals, change the glucose back into an artificial, synthetic type of fructose called high fructose. (Freeston)

High fructose became big real fast. In 1984, Coke and Pepsi changed from cane sugar to HFCS. True connoisseurs could tell the difference, but there weren't many of us.

Today high fructose corn syrup (HFCS) is the preferred sweetener in most soft drinks and processed foods. Read the labels. As of 1997, worldwide production of HFCS exceeded 8 billion kilograms. (Freeston)

Remember, natural fructose is contained in most raw fruits and vegetables. It is a natural food. Moderate amounts of natural fructose can be easily digested by the body with no stress or depleting of mineral stores. Natural fructose does not cause rollercoaster blood sugar, unless the person overdoes it. Natural fructose is not addicting.

High fructose corn syrup, by contrast, cannot be well digested, actually inhibits digestion, is addicting, and causes a great number of biochemical errors, as we shall see. HFCS is artificial; a non-food.

In this chapter sugar means refined, synthetic sugar from beets, cane, and HFCS. The harmful physical effects are essentially the same from all three. More later.
WHAT ARE CARBOHYDRATES?

Everyone knows that food comes in three forms: fat, protein, and carbohydrate. Most foods have all three, in varying proportions.

Carbohydrates are made of carbon, hydrogen, and oxygen. The main carbos are sugar, starches, and cellulose. (Dorland, p121)

Sugars are sweet carbohydrates, either single or double molecules: monosaccharides or disaccharides.

Starches are the main form of carbohydrate storage in plants. Starches are polysaccharides, which means strings of more than two carbohydrate molecules. Starches break down to sugars – that's why if you keep a cracker in your mouth for a minute, it begins to taste sweet.

Cellulose is made of long, fibrous strings of carbohydrate, mainly for structural support of a plant. It is cellulose that provides us with fiber in the diet.

Fruits contain mainly sugars, while vegetables contain mainly starches. And both contain cellulose.

COMPLEX vs. SIMPLE

An apple contains natural sugar: fructose. A potato contains natural starch. But these are whole foods containing much more than just isolated carbohydrates. Apples and potatoes grown in good soil also contain vitamins, minerals, and enzymes. Such foods are complex carbohydrates, meaning that they are complete foods.

The problem comes in with processed sugar and processed starch. White table sugar has no nutrients. White bread is a processed, artificial starch. These are not foods – they do not nourish. We call them simple carbohydrates. Even when they are broken down to individual glucose molecules by digestion, it is completely different from the glucose end-product of a digested apple, for example. That's because apples don't simply break down into isolated glucose molecules. Other nutrients and co-factors are present, which are necessary for the body to make use of the glucose: enzymes, minerals, vitamins.

White sugar and white bread require enzymes, vitamins, minerals, and insulin from the body in order to act. And the action is one of irritation, removal, and defense instead of nutrition.

All enzymes and nutrients have been purposely removed from white sugar and white flour by processing. The result is a synthetic manmade carbohydrate, occurring nowhere in nature. The body regards such as a foreign substance as a drug.

Another way to look at it is this: when complex carbohydrates are broken down, the result is a usable glucose molecule. When simple (refined) carbohydrates are allowed to ferment in the digestive tract because they can't be broken down, the results are alcohol, acetic acid, water, and carbon dioxide. (Dufty p 183)

Not so usable, except for the water.

In addition to these by-products, simple carbohydrates do increase blood glucose by an unregulated, unnatural amount. And this is the real problem with refined sugar: the quantity of pure glucose suddenly taken in.

Most books, most doctors, and most nutritionists fail to make this simple distinction between simple and complex carbohydrates. They talk about apples and Coca-Cola both as carbohydrates, because
they say that both ultimately break down to glucose, and that’s the form the body needs. It’s the standard medical approach. Same mentality that thinks vitamin C is ascorbic acid. The same mentality that thinks that milk is a good source of protein, or of calcium. Loads of information, very little understanding. These are the type of nutritionists who confuse organic gardening with organic chemistry, and talk about when you buy organic produce in the supermarket, that’s the kind that is carbon-based. Or the type of “nutrition” mentality that has bypass patients eating mashed potatoes and gravy and canned sugar drinks the day after surgery so they’ll "get their strength back."

Most nutritionists are trained to think that diabetes is genetic and therefore may have to be controlled with drugs.

Like any other area that concerns health, most of what is published about diet and nutrition is unfounded speculation. Worse if they have credentials.

With sugar, ingestion is far different from digestion: just because you ate it doesn't mean you can use it. This is why counting calories and food combining and blood typing and the Zone and other passing fads are so irrelevant: it doesn't matter what you eat; it matters what you digest.

If you re-read the last three sections, you probably now know more about sugar than 90% of health professionals. This will become obvious when we get to diabetes.

MINI HISTORY

Sugar Blues by William Dufty was a classic book of the mid 1970s. In a compelling, informal fashion, the book provides a broad historical and political sketch of sugar economics from the 15th century to the present. Dufty thoroughly references his basic data with respect to the trade empires that emerged around sugar: molasses, rum, and slaves. The taxes on sugar alone brought great wealth to the rulers of England, France, Spain, and Holland, as well as to the slave traders, shipping merchants, and plantation owners. (p. 33) Many modern fortunes whose names we would recognize today were amassed at this time.

Dufty draws interesting parallels between opium and sugar, as both were things we don't really need, both became sources of huge revenues and taxes, both have some dark history involving immense human suffering, and both can cause physical degeneration and death after a long period of dependence.

REFINING CAME LATER

During the first centuries of the sugar industry, cane sugar was made into molasses and rum, for shipping across the oceans. Sugar itself was raw; light brown in color, and still retained some of the original nutrients. Natural sugar doesn't cause diabetes; if you eat too much natural honey, you just get sick.

The refining of sugar cane evolved gradually, and spread all over the world in a short time. Refining began with old stone mills, powered by rivers or windvanes, where whole wheat was ground into flour. As time went by, machinery got better and better at removing the outer husks from the wheat and leaving behind only the white inner simple carbohydrate, devoid of minerals and vitamins. Same with beets and cane. Processing methods, which stripped away all vitamins, mineral, and enzymes, got so good at making a consistent product of white crystals, that the price of sugar went down and down, all over the world.

Sugar consumption, however, went up and up. What used to be a delicacy only for the rich, evolved to becoming a staple for everyone. Most sources estimate that today sugar makes up about 20% of
the calories of the average American diet! Just imagine – that means that on the average, 20% of what Americans eat has no nutrient content. Worse yet, it's physically destructive, as we will see.

Dufty offers layer upon layer of proof that modern mankind is degenerating, devolving as a race, becoming sicker and weaker decade by decade. Certainly nothing in the 20 years since Sugar Blues came out can dispute that idea: look around you. Seems like half our school kids are either on Ritalin, inhalators, or some kind of allergy medicine most of the time.

In a more scholarly work, Dr. Weston Price had come to the same conclusions in his landmark journal Nutrition and Physical Degeneration. In the 1930s, Dr. Price traveled around the world examining the teeth and skulls of every primitive race he could find – American Indians, Swiss Alps villagers, Eskimos, aborigines, Scottish primitives, Fiji islanders, and more.

Price's conclusions are not subject to debate – instance after instance, when a people would become exposed to western foods – white sugar and white flour – within a very few years, they would be experiencing rates of tooth decay, tuberculosis and arthritis equal to the "civilized" nations. Price found that as long as a group of people could remain isolated and eat their 'primitive' simple foods, the rates of tooth decay and degenerative disease were practically zero.

Price's work has never been challenged.

**HOW MUCH SUGAR DO WE REALLY NEED?**

White sugar, none, according to Dufty. But modern needs are something created by commerce, by advertising, by politics. How many people do you know who drink at least one 12 oz soft drink per day? If the sugar from each bottle could be crystallized out, it would amount to 10 teaspoons. (Appleton, p 16) Put 10 teaspoons of sugar in the bottom of an empty coke bottle and look at it. Is that a lot? In a normal bloodstream, which is about 5 liters, approximately 2 teaspoons of glucose should be circulating at any one time. That means that one coke raises the blood sugar to 5x its normal level, for at least four hours.

Now stop here a minute. This is one soft drink. Do you know anyone who drinks more than one soft drink per day? How about per hour? Do the math.

To that, add the sugar in desserts, ice cream, jams, jello, artificial fruit drinks, and candy. This is not even mentioning hidden sugar found in ketchup, processed meats, baby food, condiments, cereals, and most other processed foods whose label you may chance to read.

And by the way, did you know that alcohol is a sugar? So add wine, beer, liquor. And even tobacco! Getting the picture here? Think you know anyone with only 2 teaspoons of glucose in the blood?

**SUGAR ABSORPTION**

The simplest sugar of all is glucose. Both natural and processed sugars ultimately break down into glucose, which is a single molecule. Glucose is readily absorbed through the digestive tract. It goes immediately into the bloodstream.

Glucose is necessary for cell function, especially brain cell function.

The level of glucose in the blood is a very big deal. Too much and we become diabetic; too little and we pass out.

The body has figured out many ways to try and keep the glucose level within a certain range: 90 - 140 milligrams per deciliter. (Guyton, p 863)
The pancreas and the adrenal glands work together to fine-tune blood sugar levels at all times. As the blood flows by, the pancreas senses the high glucose content and puts out insulin. Insulin gets rid of the glucose in two ways:

- into the cells
- storage in the liver, in the form of glycogen

The adrenals do the opposite; when blood sugar is too low, they send a hormone called cortisol to the liver to get some of the stored glucose out of storage. The body is then ready for action: fight or flight.

A great system, evolved after countless millennia, perfectly capable of balancing blood sugar, with a diet of natural foods. Then manmade sugar came on the scene – a compound that nature could never have invented. This new chemical, offering so much refined glucose to the bloodstream without the benefit of the usual accompanying fiber, minerals, vitamins and enzymes – was an assault on a human biochemistry that had evolved over the centuries. All these precious stores of nutrients which the body had other plans for, must now be mobilized and used up in order to deal with 150 pounds per year of a devitalized non-food. Hence the phrase 'malnutrition of the affluent.'

**LAST CALL FOR ALCOHOL**

Alcohol is a sugar. It is a refined sugar, and more – it is a fermented sugar. Fermented means half-digested. Cancer thrives in an environment with little or no oxygen. That's why cancer loves refined sugar – not being well digested, sugar ferments in the body. With alcohol, it's already fermented when we drink it. Fermentation occurs in an anaerobic environment: no oxygen.

We know the sources of alcoholic beverages:

**Beverage – Source**
- Wine – grapes
- Beer – barley
- Whiskey – corn or rye
- Gin – rye and juniper berries
- Rum – sugar cane
- Vodka – wheat

These alcoholic beverages are the fermented sugars of the individual fruit or grain. Alcohol is a super-refined substance. It enters the body with no vitamins, minerals, or enzymes to aid in its breakdown. At least sugar products must pass through the digestive system before entering the bloodstream. But alcohol is absorbed into the bloodstream immediately, right through the stomach. Alcohol makes an immediate assault on all the body's stores of enzymes, insulin, vitamins, and minerals, which seek to break it down and maintain the blood's delicate pH. That's how alcohol ages the body so fast – that's why many alcoholics look so old. Chronic dehydration. All the information in this chapter about white sugar can be applied to alcohol as well. The bad effects on the body systems are much worse from alcohol, however, because refining has taken that extra step – fermentation – no digestion necessary before absorption.

Remember that bit of PR a few years ago about how drinking a little glass of wine prevents heart attacks? The only benefit was the natural pycnogenol antioxidant in the grapes – you could get the same effect from drinking grape juice. Another Orwellian marketing masterpiece, from the same people who brought you folksy gems like:

- we shouldn't eat fats
• an aspirin a day prevents heart attack
• milk builds strong bones and teeth

ENERGY KICK? TRY ENERGY DRAIN

No matter what athletes you see on TV commercials chugging famous soft drinks, none of them is that stupid. What are they drinking on the bench? Water. The illusion of energy from refined sugar is something that sugar advertisers have capitalized on for decades. That initial burst of nervous energy is immediately followed by a body in crisis wasting energy trying to bring things back to normal. These efforts make the body tired, sleepy, and run down.

Not just sugar advertisers, but many of the medical "experts" who were hired guns for the sugar empire wrote thousands of "research" papers proving that sugar was beneficial and gave people energy. Dufty cites examples of this deception over three centuries. It's still going on today; examples can be found practically every month in the popular magazines. You gotta figure that billion dollar industries can afford to buy a few scientists along the way.

The initial blast of energy is the adrenal shock reacting to a non-food in the system. Fight or flight. Refined sugar stimulates a whole range of physiological responses, all of which are unnecessary, all of which waste the energy of the cells and systems, and all of which are followed by a condition of exhaustion soon after the brief rush subsides. Then you're down and the monkey needs another bump.

WHAT DOES REFINED SUGAR REALLY DO TO THE BODY?

An excellent chart on pages 68-72 of Appleton's book gives a quick overview. Some excerpts:

Refined sugar:
• suppresses the immune system
• causes hyperactivity in children
• kidney damage
• mineral deficiencies, especially chromium, copper, calcium and magnesium
• makes the blood acidic
• tooth decay
• advances aging
• digestive disorders
• arthritis
• asthma
• Candida albicans
• decreased blood flow to the heart
• causes osteoporosis
• causes food allergies
• causes eczema
• atherosclerosis
• free radical formation
• loss of enzyme function
• increases liver and kidney size
• brittle tendons
• migraines
• blood clots
• depression

Appleton references each one of these problems with a different study. These symptoms are just various manifestations of one main mechanism: sugar cannot be digested. Sugar inactivates digestive enzymes. It remains in the tract, fermenting. Some of the toxic mass gradually seeps into the bloodstream where it acidifies the blood. The body tries desperate measures to maintain the normal pH of the blood. The above symptom list shows the end-results of those efforts, the signs of their failure, or else the degeneration of a tissue that has become the final resting place for fermenting debris in an overloaded system.

ACID BLOOD

Body pH is a big consideration when soft drinks are taken in. If you pour a glass of Coke into 10 gallons of water, the pH will drop from 7.8 to 4.6 immediately. (Whang, p 22) Our survival range is pH 7.3 - 7.45 in the blood. So obviously the body has to go through all kinds of complicated steps to keep our 5 liters of blood from getting too acidic. This process wastes vitamins, minerals, and enzymes which should have been used for normal metabolism. See how sugar can age the body? Worn adrenals, used-up pancreas.

Another problem with an over-acid digestive tract is that the good bacteria, the intestinal flora, are destroyed. Their job was the final stages of digestion. Without them, rotting and stagnation of food is promoted, instead of digestion. Half-digested carbohydrates are described as fermented, just like with making wine or liquor. The half-digested carbohydrates leak into the bloodstream intact and cause problems in the joints, muscles, organs – any place they lodge. Examples of diseases that come about in this manner:

- osteoarthritis
- hepatitis
- cirrhosis
- kidney disease
- chronic fatigue
- colitis/irritable bowel syndrome
- Candida albicans
- reflux/heartburn
- chronic allergies

Candida albicans is a common yeast infection that goes all through the body. Many researchers estimate that as many as 80% of American women may have Candida. (Anderson) The #1 way Candida occurs is floral imbalance – normal flora keep Candida and other potentially bad organisms in check. Not only does half-digested sugar kill off the good bacteria. In addition, Candida thrive on it. So it's a double whammy, the way sugar promotes Candida albicans.

ENZYME DISRUPTION

Many of the problems listed on the previous page are the result of incomplete digestion and breakdown. Refined sugar has the ability to change the shape of our normal digestive enzymes. (Appleton, p 65) Enzymes are proteins that have specific shapes in order to break down other specific molecules. When refined sugar changes the shapes of the digestive enzymes that are present for the express purpose of digesting that refined sugar – see what happens? The sugar doesn't get digested. It just sits there and rots. Fermentation.
This is why drinking a coke or a beer just before dinner will kill your appetite. And interfere with your ability to later digest the fats and proteins in the meal. Sugar destroys the digestive enzymes.

MINERAL IMBALANCE

Besides enzyme destruction and acidifying the blood, sugar depletes the body of minerals. Most of the damage to the body resulting from sugar can be traced to one of these three events.

Many life functions of cells and tissues are dependent on the presence of minerals. The action of many vitamins are dependent on the presence of minerals.

First off, we have seen the importance of chromium for insulin to operate. A double threat is happening with chromium:

- chromium is depleted as the body attempts to metabolize and remove white sugar
- as the stores are used up, there won't be enough chromium left to allow the available insulin to work.

For this reason, many people who are being diagnosed diabetic may be just chromium deficient. Even if insulin is present, it cannot operate on sugars without chromium as a co-factor. (Appleton, p 61) Very often chelated chromium supplements together with eliminating refined sugar from the diet can normalize a patient who was incorrectly labeled as diabetic.

Sugar also causes osteoporosis, by the following mechanism: In order for calcium to be used by the cells, there must be a proper amount of phosphorus also present in the blood. Without the correct ratio of calcium to phosphorus, the calcium is in the wrong form – a harmful form. A form that precipitates out of solution and forms stones in the gallbladder, kidneys, and liver. Sugar wastes our phosphorus stores. Soft drinks contain phosphoric acid, which further disrupts the phosphorus balance. (Appleton, p 83) Without the right form of calcium in the blood, the body borrows calcium from the bones and teeth. Dr. Weston Price proved this in the 1920s. (Price)

It is the imbalance of calcium caused by refined sugar which causes tooth decay, even more than the acidic saliva attacking the exterior enamel of the teeth.

Here's another difference between raw and refined sugar. Raw sugar doesn't rot the teeth. According to Royal Lee:

"Refined sugar has lost its minerals and will pick up minerals right out of the tooth ..., you can take a freshly extracted tooth and soak it in raw sugar solution, and it will have no effect. You soak it in the refined sugar and you will eat it full of holes." – Conversations, p 46

THE GLYCEMIC INDEX

The suffix -emia at the end of a word means in the blood. Glycemia means glucose in the blood.

All foods containing carbohydrates affect the blood sugar differently. In 1981, David Jenkins came up with a way to compare foods with respect to their effect on blood sugar. (Miller) He called it the Glycemic Index. The GI is based on glucose, which has a value of 100. An apple for example has a GI of 38 and is therefore said to be low on the Glycemic Index. White bread which is rated at 70 is said to be high on the GI.

White sugar (sucrose) is refined and readily absorbed. Though it is high on the glycemic index (65), white sugar interferes with normal digestion of other foods in the stomach and intestine. White sugar causes sharp drop-offs in blood sugar level after it is removed from the blood, because it has
destroyed digestive enzymes necessary for breaking down the other food that is still in the tract, waiting to be absorbed.

Natural fruit sugar, or fructose is generally low on the glycemic index (23). (Miller, p.29) Fructose is quickly and easily used by the cells and thus removed from the blood.

Here we see one of the common errors of Junk Science and the Everybody's-A-Nutritionist phenomenon. Some "experts" will say that it's bad to drink natural fruit juice because of all the sugar. Such a notion is completely without foundation, and shows no understanding of whole foods, the importance of enzymes, or the Glycemic Index. Fruits contain within them the enzymes such as maltase and invertase necessary to break down their fructose into usable glucose. The glucose is then either used as fuel or stored. People don't get diabetes because they drink too much orange juice. They get diabetes from drinking a six-pack of cola every day, or that box of donuts, or a quart of ice cream.

In addition, fruits are loaded with whole food vitamins, minerals, cellulose and natural antioxidants. These are fundamental nutrients.

Alternative-Lite holistic practitioners making recommendations for cancer patients who have refused standard treatment sometimes tell the patients to avoid fruits and fruit juices because "cancer loves sugar." Such unfounded advice is not only incorrect; it deprives the patient of an important source of nutrient forms, which are essential for fighting cancer and boosting the immune system: antioxidants. Most credible holistic nutritionists, like MacDougall, Robbins, Dufty, Schultze, Gerson, et al., realize that normal amounts of both fruit and vegetable juices are extremely useful for anyone trying to overcome any immune-challenging disease.

DIABETES

The ancient Greek physician Hippocrates never even mentions diabetes. (Dufty, p.78) Before sugar came on the scene, diabetes did not even exist.

The English physician Thomas Willis first identified and named diabetes in 1674, after England's annual sugar consumption had gone from zero to 16 million lbs. in the previous 200 years. But Willis was unable to say anything bad about sugar since he was King Charles' personal physician, and Charles was making a ton of gold off the sugar trade. (Dufty, p. 75)

Very good statistics were kept in Denmark, comparing refined sugar intake with diabetes deaths:

<table>
<thead>
<tr>
<th>Year</th>
<th>Pounds consumed per person</th>
<th>Deaths from diabetes /per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880</td>
<td>29</td>
<td>8</td>
</tr>
<tr>
<td>1934</td>
<td>113</td>
<td>18.9</td>
</tr>
</tbody>
</table>

Years of loading up on indigestible sugar wears out the pancreas. You'll remember that insulin, produced by the pancreas, is supposed to allow sugar to be taken into the cells and used. When the body is young, the pancreas works well. Excess sugar in the teen years gets the pancreas used to continually dumping lots of insulin into the bloodstream to get ready for the day's sugar load. Since insulin only lasts about 15 minutes, the pancreas may have to work all day long. Here's where the rollercoaster first begins: all that free insulin will serve to abnormally lower the blood sugar on those occasions when the person forgot to eat his usual 10x normal sugar intake. All that insulin, and all it's got to work on is a normal level of blood glucose. Enter hypoglycemia – low blood sugar. The body gets accustomed to excesses of both sugar and insulin. For awhile. Funny how pigging out on sugar causes low blood sugar, but that's how it happens.
A few years later, when insulin no longer can keep up with the incoming daily sugar fix, the pancreas finally gives up. Unused sugar builds up higher and higher in the blood. The kidneys try their best to excrete it, causing the classic 'sweet urine' sign. That's what diabetes is: constantly high blood glucose. The idiotic solution is to take a drug to get rid of all that extra glucose, instead of simply to stop eating 10 or 20x as much sugar as the body can handle.

Thus we see the stupidity of recommending candy for diabetics to "keep their blood sugar up." Candy just keeps the rollercoaster going for another ride.

Glucose is the prime fuel source needed by the cells. The person becomes ill because all this glucose is in the blood, but not in an environment that it can be used by the cells. So the body starves. Gradually, other problems occur:

- extreme thirst
- frequent urination
- ravenous hunger
- dizziness
- disorientation
- memory loss
- coldness in hands and feet
- bruising
- weight loss
- kidney disease
- fatigue
- the shakes
- sores and cuts that don't heal
- headaches
- skin eruptions

Sound like a blind date?

What is the medical approach to diabetes? Same as the medical approach to anything: sell as many drugs as possible. In this case it's synthetic insulin to the rescue, or at least drugs like glucophage and glypizide.

FAKE INSULIN

The discovery of insulin was supposed to be the big savior. The 1923 Nobel Prize went to Sir Frederick Grant Banting and John Macleod for the discovery of insulin. At first, insulin was difficult to make, and expensive. Only rich diabetics could afford to have glandular extracts from animals injected into their blood to compensate for their own spent pancreases.

But with the arrival of synthetic insulin, which a diabetic would have to inject daily for the rest of his life, all the alarms at the drug companies went clang. Fake insulin could be patented, mass-produced and sold from now till the end of time! This was a very big deal, especially with the unstoppable rise in white sugar consumption, which would insure an endless stream of new diabetics.

Dufty tells of a much more important discovery that occurred the year after insulin was discovered, which was kept quiet. In 1924 a top researcher named Dr. Seale Harris discovered the connection between too much insulin in the blood and hypoglycemia. He found out the obvious: all that daily white sugar called up too much insulin. Too much insulin in the blood got rid of too much glucose in
the blood, making the patient weak and dizzy when the blood sugar got too low. But what sentenced Dr. Harris to the Hall of Obscurity for all time is that his solution was not some manmade pill that would make billions for the drug companies. No, Harris’s solution to hypoglycemia was obvious: stop overloading on white sugar, and thus normalize natural insulin production.

No Nobel Prize for Harris. The medical approach is always the same: if an imbalance cannot be corrected by a new drug, any natural remedy, like sensible eating, is called "unscientific."

Do doctors want to screen people by repeated Glucose Tolerance tests, just to make sure they're really diabetics before they're sentenced to a life of fake insulin? Are you kidding? Some people are put on insulin after a single lab test with a borderline high reading of blood glucose. Or at least given the prescription for the two G drugs listed above.

**WHAT’S WRONG WITH THESE DRUGS?**

First off, fake insulin.

Synthetic insulins are of three main types:

- rapid acting
- intermediate acting
- long acting

Some fake insulin comes from yeast. Scientists have found how to get a compound that is structurally identical to human insulin from baker's yeast. (Physicians Desk Reference, p 1917) Or from E. coli bacteria (p. 1463) Or from pigs: pork pancreas! (p 1477) There can be many different combination prescriptions depending on the doctor's opinion (guess), mixing the three types of insulin at certain times during the day. For each type – rapid, intermediate, and long acting – there is a multitude of different brands to choose from. Like Baskin-Robbins.

The main problem is that even though they pretend it's the same exact thing as the insulin the body produces, it really isn't. It's the usual science/numbers game, pretending that the body is just a car, and if we figure out the parts, we can replace anything. Or like if you dumped all the ingredients for a cake into a mixing bowl and just stirred it all up, what kind of a cake could you expect?

The catch here is timing. The body knows precisely when to put out exactly the type and amount of insulin from the pancreas that is needed. The whole blood sugar regulation process is an extremely sophisticated affair, involving the adrenals, the liver, and the thyroid in addition to the pancreas. We only know part of the story. There’s a lot more to the swirling mystery of blood sugar than just figuring out the structure of insulin. Proof of that is diabetes has risen to the #7 cause of death in the U.S. today. (Centers for Disease Control)

Secondly, glucophage. This is a pill given to patients who are first diagnosed with diabetes. Glucophage artificially controls blood glucose by interfering with the body's normal rates of glucose absorption. Although the manufacturer warns that diet restriction should be the primary means of controlling diabetes, (PDR,, p. 797) in practice glucophage often may be prescribed after a single high blood sugar reading, without the certainty that the patient actually is diabetic. And rarely are diet choices evaluated.

Glucophage has several major side effects, which are seldom mentioned:

- kidney damage
- lactic acidosis (fatal 50% of the time)
- nausea
- vomiting
- abdominal bloating
- anorexia

– page 798 PDR (Physician’s Desk Reference)

Glipizide is the other popular diabetic pill. This drug requires a functioning pancreas. Glipizide artificially kick-starts the pancreas to produce more insulin. (PDR, p. 2182) The actual way the glipizide lowers blood glucose is unknown. Perhaps that's why it has major side effects, listed by the manufacturer:

- increased risk of cardiac mortality
- kidney disease
- liver disease
- hypoglycemia(!)
- loss of control of blood glucose
- constipation
- skin rashes
- anemia
- dizziness
- headache

Outside of that it should be fine.

All you guys out there on these G drugs – your doctor ever tell you any of this?

Whether you're talking about manmade insulin or diabetes drugs in pill form, one fact has not changed since 1923:

These drugs have never cured one person of diabetes.

Think about it. Did you ever in your life know of a diabetic who shot insulin or took these drugs for many years, who eventually recovered and was fine, with a normal life? Of course not. Did you ever hear of a diabetic who was told to stop eating white sugar? Of course not – instead they tell the diabetic to eat more sugar when he feels weak! That's the game: the point of diabetes drugs is never health or recovery or curing the disease. It's always aimed at one target: sell more drugs.

What's the goal of medical therapy? As always, cover up the symptoms. Since most doctors have no background in nutrition, they generally tell the patient that diabetes is a disease which he will now have for life, that it was genetic, and the only way to control it is with drugs. The doctor won't even ask about the patient's recent diet – such information is irrelevant in making the drug sale. Many actually go so far as to say that what the patient eats will have no effect on the disease, now that the pancreas is worn out. This is why dietary advice is absent after a diagnosis of diabetes is given.

The absurdity and error of such recommendations are appreciated by the thousands of patients, initially diagnosed as diabetic, who have cured themselves completely, simply by cleaning up their diet.

Dr. Stephen Gyland proved in the 1950s, like dozens of other healers after him, that the only way diabetes can be actually cured is to change the diet radically. (Gyland letter) There are many holistic programs which demonstrate consistent success in reversing adult onset diabetes, the most common type. Take a wild guess what the first step is, in the healing process. That's right; no more refined sugar. Including alcohol.
This sounds very simple, but in reality it’s incredibly difficult. Look what the patient has to overcome:

1. He doesn’t want to give up sugar. He’s addicted to it, loves the taste, and needs the short-lived euphoria.

2. The doctors don’t say the patient has to give up sugar. In fact, the doctor will tell the patient to eat candy when he feels light headed, to "bring his blood sugar up."

3. Sugar is everywhere: in most foods, in a thousand forms, and it lines the checkout aisles that people have to wait in to buy groceries.

4. There’s going to be an unpleasant withdrawal period.

This is where medicine is so well-positioned. Medicine is saying, Don’t worry about a thing. We’ll take care of everything. Give us the responsibility for your health, and go on eating whatever you want. Your sugar-binges for the past 20 years didn’t bring on your diabetes; it’s genetic.

For a weakening, softening society with declining health, diabetes medication is the perfect solution. It delays the decision, takes the pressure off, and avoids unpleasant pro-action. Great! I can keep on drinking coke, like everyone else! All I have to do is take these pills and the doctor says I’ll be fine. Lots of people are doing it.

That's for sure. Lots of Americans are on diabetic medication. And the fact that medication has never cured anyone of diabetes has made us a country where diabetes is now, did I mention, the 7th leading cause of death!

SUGAR AND THE IMMUNE SYSTEM

On the way to becoming a full-blown diabetic, lots of other problems arise from overdose of refined sugar. The most obvious is the destruction of the immune system.

If you're old enough, ever notice how children today seem to be sick all the time, compared with 20 years ago? Today they've always got colds, they're always running to the doctor for antibiotics, cough medicine, or spray inhalators. And what else are they always running for? What is their primary reward for 'being good'? Sugar.

The whole absurdity of the chase-your-tail drugs and big money sugar game was brought sharply into focus recently by two headlines which appeared two days apart in the San Jose Mercury News, one of California’s largest and most insipid newspapers. On 2 Sept 99, the headline read:

"S.J. Unified poised to sign Pepsi-only deal."

The story proceeded to detail an agreement between Pepsi and the San Jose city schools to exclude all other soft drinks from the schools' cafeterias and soda machines for the next 10 years in exchange for kickbacks of nearly $10 million! It was so weird – the story wasn’t even trying hide the sweetheart arrangement in any way, or suggest that it was anything other than business as usual for a private company to kick back a percentage of the profits in trade for a juicy public contract. Wonder what Coke offered? But the health issues were not even mentioned – tooth decay, allergies, hyperactivity, Ritalin, violence – not a word. Just business.

And then two days later, 4 Sept 99, the main headline in the same paper reads:

"Asthma at epidemic levels"

This two-page article, with its 'Gee, I dunno' stance, reported that asthma among American school
children is higher than it has been for 20 years, and increasing out of control. In its standard
disingenuous way, the Mercury pretends to be baffled that researchers and drugs have not even
made a dent in the number of children who walk around schools with inhalators, take multiple
medications, or who die every year from asthma.

"...asthma remains a medical mystery."

The article quotes the CDC (Centers for Disease Control) statistics showing how asthma in the U.S.
"... grew more than 150% between 1980 and 1998 – from 6.7 million to 17.3 million" cases."

The article states that in some U.S. cities, as many as a quarter of the children suffer from asthma.

Clinton's answer? Increase medical spending from $110 million to $178 million. Brilliant. Give
researchers who after several decades admit they still have no idea what causes asthma another $70
million to continue their investigations. CDC's David Mannino sounds so humble when he states that
they're like "...a bunch of blind men on the elephant."

Now stop here a second. This is just like cancer research. Do you think if these researchers whose
living depends on getting government research grants actually found a cure for asthma they would tell
us? And then what? They'd be out of a job. As long as they "keep looking" everybody's happy – the
money keeps pouring in.

In its plodding, predictable fashion, the Mercury goes on to highlight those areas where asthma is
worst, and talk about the "epidemic" and quote various experts explaining how mystified they are.
And then the requisite heart-rending individual story of the kid who "can't even go to school any more
because his doctors can't find a cure"

**CURE FOR ASTHMA**

You want your kid to lose his asthma? Stop two things for 60 days: dairy and sugar. That's all. Just
try it. Both are major allergens. As we have seen, sugar inhibits digestion by destroying enzymes.
Undigested sugar just stays there in the tract and in the blood, and then goes throughout the body,
lodging anywhere it can, including the bronchioles of the lungs. And what's the body's response to
any lung allergen? Mucus. Narrows the air passages, and the body goes into distress because it
thinks it's going to suffocate.

**MILK …**

is just as bad. The definition of pasteurization is that the milk is heated until what? All enzymes are
destroyed. Without enzymes, it can't be broken down, because now man has created a food that
doesn't exist in nature. Forget that we're the only species to drink the milk of another animal. Forget
that we're the only species to drink milk after childhood. The main thing is – we can't metabolize it.

**CALCIUM?**

Another joke. Remember all those enzymes that got destroyed by pasteurization. One of them was
called phosphatase – essential for calcium absorption. We don't get calcium from milk. Children
don't need milk for strong bones and teeth. Milk doesn't prevent osteoporosis. All these ideas were
ingrained into our conscious from where? The school dietary "education" programs since the 1950s.
Paid for by whom? Right, the American Dairy Industry.

After you find all this out, the killing blow is when you learn that milk causes osteoporosis, because
metabolizing all this artificial manmade food steals calcium from the bones and teeth. Who's got the

'\textit{Lactose intolerance}', – you always hear that. There's no such thing. They want to pretend some people have a genetic defect whereby they can't digest milk sugar. Lactose is milk sugar. But it's not the milk sugar we're allergic to – it's the milk. We all have milk intolerance. No one can digest pasteurized milk!

But we're not allowed to know all this. The above paragraphs challenge three separate billion-dollar industries: the sugar trust, the dairy trust, and the drug trust. None of them wants people to discover that asthma and osteoporosis can be eliminated simply by removing sugar and dairy from the diet. No, no, that won't do. That's not "scientific." Diseases are cured by one thing; drugs. Right? That's real medicine. If people change their diets, they won't need all those drugs and calcium supplements, and even worse, Clinton won't be giving out any more $178 million presents to try and discover the "cure" for asthma.

In his forgotten landmark work, Nutrition and Physical Degeneration, Dr. Weston Price proves beyond the shadow of a doubt the association between deteriorating health of a country's people and their exposure to white sugar and white flour.

So let's bring this twisted puzzle into focus. With sugar and dairy, we're talking about immune compromise.

The main part of the immune system is the white blood cells. Their job is to circulate and locate foreign stuff. Once they locate something alien to the body, the white cells attack it, destroy it and carry it off. A slight oversimplification, but generally this is a big part of how the immune system works.

Refined sugar interferes in many ways. First of all, refined sugar blocks digestion, allowing undigested food to get into the bloodstream, thus slowing circulation way down. If the white cells can't make their rounds, they can't do their job.

Appleton cites two university studies (p 52) which demonstrated that sugar suppresses the immune system by decreasing phagocytosis. Phagocytosis refers to the Pac-manlike activity of white cells munching up foreign stuff. Sugar greatly reduces the activity of the white cells' little 'flippers' (pseudopods), which are for reaching out to locate foreign debris.

Secondly, the immune system gets sensitized to refined sugar. That means it freaks out at first, trying to normalize the blood. But after awhile, the immune system adapts to the abnormal levels of sugar, and accepts the idea that it will operate at a sub-normal level. The sugar no longer triggers such a violent response, and as a result, neither do other foreign agents. The immune system gets more and more lenient about what level of contamination it will allow the blood to maintain. Overall health declines. This is right out of Hans Selye, the guy who discovered and studied stress.

A third way sugar depresses the immune system is by sticking to protein. In the early part of the 20th century, Louis Maillard proved that refined sugar has a particular capability for sticking to protein foods, like meat, and forming a strange new complex called glycenated protein. Food chemists call Maillard's discovery the Maillard Reaction. We lack enzymes for these weird proteins, and so they don't get broken down very well in the digestive tract. The immune system is then exhausted by trying to attack them year after year, since they are foreign material.

That's why after a big burger and a large coke, you may feel slightly nauseated. The sugar binds to the meat, making a glycenated protein – a foreign-burger.
Funny thing is, the Maillard Reactions have been studied not primarily by nutritionists, but by food processors. Food chemists have evolved very sophisticated methods of gluing sugar to proteins, which is useful in the production of bread, pastries, candy, processed meats and fish, beer, crackers, and coffee. Carmelization. Taste and color are their prime concerns, not nutrition. (Scandrett) These foods are chemically processed, making it difficult if not impossible for them to be digested in our bodies.

Lowered levels of immune response is called immunosuppression. Its leads to frequent flu, colds, fatigue, and other diseases of civilization. The more refined the diet became, the more degenerative diseases prevailed – arthritis, allergies, colitis, diabetes, etc. This is not a theory.

**SUGAR AND OBESITY**

Obesity is defined as being more than 35% over normal weight. In 1993, 30% of Americans were obese. (Fats That Heal, p 405) At the present time, nearly half of Americans are in this category! The percentage increases almost every year.

Excess sugar consumption is largely responsible for obesity. Consuming 160 lbs per year of anything indigestible would probably have a less than salubrious effect on the body. But in the case of sugar, it's worse. Sugar becomes converted to fat. Excess glucose is changed to fatty acids, then triglycerides, then stored as adipose tissue. (Erasmus,p 34) This accounts for Joe Sixpack's spare tire. Or fat little Johnny, who must have his coke every couple of hours.

Worse news is that the types of fatty acids produced from refined sugar are killer types – the kinds that clog arteries. They are not essential fatty acids, which are necessary for complete health, and actually interfere with normal operation of the good, essential fatty acids. (Erasmus, p 35)

**SUGAR, CORTISOL, AND MUSCLE BUILDING**

The main reason pro athletes don't chug soft drinks is that they know what sugar does to muscle. As we saw in the Creatine chapter, muscle is either torn down or built up by the opposing action of two hormones: cortisol and testosterone.

A third hormone is also involved: insulin. Before this gets too complicated, keep these three facts in mind:

1. cortisol wants to maintain high levels of blood glucose for fight or flight situations
2. cortisol's favorite target is muscle. Cortisol gets amino acids from tearing down muscle. The amino acids are then converted to glucose
3. insulin regulates cortisol

So. We have seen that a worn-out pancreas no longer puts out sufficient insulin. With no insulin, cortisol is not regulated. Cortisol then has a free hand to tear down muscle. Sugar works into this scenario in two separate ways:

1. After many years, a high sugar diet destroys the pancreas's ability to put out insulin
2. processing refined sugar out of the body requires chromium. Eventually, with a high sugar diet, we are chromium-deficient. Chromium is necessary to activate insulin. With no chromium, even the little insulin still present cannot do its job. Result: cortisol runs wild and tears down muscle.

This is why diabetics tend to be flabby – muscle destruction. Remember all this after a workout. If
someone hands you a coke, think of canceling out all the good you just did for your muscles by the workout.

**TOOTH DECAY**

As noted above, sugar promotes a condition of acidity wherever it goes – the mouth, the stomach, the blood. In the mouth the pH gets lower with the presence of sugar. At around pH 5.5, the saliva begins to dissolve tooth enamel. (Appleton, p98) After eating sugar, the pH of saliva may go down to 4.5 and stay there for 20 minutes or more. This is why the dentists always say that even if you can't brush your teeth after eating sweets, at least rinse the mouth with water as soon as possible. That would prevent much of the dissolving of the tooth enamel.

Again, the definitive study of the effect of sugar on the teeth was done in the 1930s by Dr. Weston Price. Price traveled all over the globe – Scotland, Switzerland, Africa, the South Pacific, the Arctic, Australia, America – photographing and examining the teeth of every primitive civilization he could find. The photographs alone contained in his master work Nutrition and Physical Degeneration tell an inescapable truth – sugar has been a detriment to the human race. In case after case, savages in isolated wilderness had teeth like ivory, from centuries of eating a traditional, natural diet. Then civilization showed up. Teeth became rotten, bones became soft, and the new weaknesses were then passed on to the offspring. Then followed epidemic tuberculosis and arthritis. Dufty also talks about how the missionaries always brought the sugar. And the processed foods. Then come the slaves, and pretty soon everybody's in the real estate business. Ask the Hawaiians. Or the West Africans.

In 1955, Royal Lee noticed that impoverished people in India had "one-thousandth the tooth decay" that existed in the U.S. at that time. Many of those Indians were starving, and wouldn't cook anything that didn't require cooking, yet Lee noticed that "only one person in eighty had any cavities at all." (Food Integrity, p2)

Demineralization of bones and teeth is also promoted by the acidic environment created in the blood by refined sugar. Calcium, magnesium, and chromium are squandered in the body's attempts to rid itself of this non-food.

**ASPARTAME**

No discussion of sugar would be complete without mention of a phenomenon unprecedented in history: the marketing of a toxic chemical as an alternative to a devitalized food.

Aspartame (Nutrasweet, Equal, etc.) was discovered in 1965 by the pharmaceutical firm G.D. Searle. The whole story of how aspartame and diet soft drinks became a billion dollar industry is a dark tale, beyond the scope of this chapter. We will just look at a few highlights here. Refined sugar is only like a drug; aspartame is a drug.

Searle, the pharmaceutical company, was doing research to invent an "ulcer drug" when a chemist James Schlatter licked his hand one day to detect a very sweet taste from contact with aspartame. Noticing that he did not die immediately, he had an idea for an artificial sweetener. It took Searle and Monsanto 16 years to get aspartame approved by the FDA. The political implications of this food additive which could also be added to drugs to make them taste better – powerful forces lined up at the trough.

When the FDA approved [aspartame] for human consumption in 1974, it went against a body of evidence so enormous as to stagger the credulity of virtually any thinking person. "What most consumers don't know," says Mike Wallace of CBS's "60 Minutes," "is that aspartame's approval was
one of the most contested in FDA history. Consumers have reported more than 7,000 adverse reactions to the FDA, ranging from dizziness to headaches to seizures."

How could such a toxin get approved for mass consumption? Consider this: aspartame was OK’d during the Reagan Era. Ronnie’s appointee as FDA Commissioner was Arthur Hull Hays. A few months after approving aspartame, Hays left the FDA. Take a wild guess what his next job was. A top position as consultant for Monsanto’s PR office!

From the very beginning, researchers had problems with aspartame’s effects on the body, especially on the nervous system. A more complete list of aspartame’s side effects is found in a Feb. 1994 report from the Department of Health and Human Services:

- nausea
- numbness
- muscle spasms
- weight gain
- rashes
- depression
- fatigue
- excitability
- rapid heartbeat
- insomnia
- vision problems
- hearing loss
- anxiety attacks
- slurred speech
- loss of taste
- ringing in the ears
- vertigo
- memory loss
- arthritis

Other researchers found that aspartame could cause:

- brain tumors
- multiple sclerosis
- epilepsy
- chronic fatigue
- Parkinson’s disease
- Alzheimer’s
- mental retardation
- lymphoma
- birth defects
- fibromyalgia
- diabetes

– Dr. Russell Blaylock

Read these two lists again. This is what people really get when they think they’re getting what? A "diet" drink that will let them lose weight and still enjoy soft drinks? And it still causes diabetes and
weight gain? Looks like some more masterful marketing, the type that sells vaccines and heart medication and fake insulin and pain killers. And the beauty of it is that the drug companies will get money both ways –

- when people drink the diet soft drinks
- when people then get all these diseases, which require more drugs.

Aspartame is a triple molecule composed of aspartic acid, phenylalanine and methanol (wood alcohol).

Russell Blaylock, a professor of neurophysiology, is the real expert on aspartic acid. In his book, Excitotoxins: The Taste that Kills, Dr. Blaylock reminds us that MSG is 99% aspartic acid. Aspartic acid is a major neurotoxin which can cause virtually any neurological disorder you can think of. (See above list) It does this by producing free radicals that kill nerve cells. Blaylock has over 500 scientific references to back up this notion of nerve damage from aspartic acid.

A chemical that kills nerve cells may mimic several neurological diseases. One is Multiple Sclerosis. With true MS, the insulation around nerves – the myelin – is being slowly destroyed, for some unknown reason. This shorts out the affected parts of the nervous system. The result is a wide range of possible symptoms – numbness, pain, confusion, headache, blindness, organ breakdown, etc. But aspartame may cause the identical presentation, and be misdiagnosed as MS. This would render any treatment for the MS useless, obviously. The point is, if someone has been diagnosed with MS, or with any other incurable nerve disorder, and they're drinking diet soft drinks on a daily basis, the physicians may be barking up the wrong tree. And the patient will continue to poison himself, maybe to death. (http://www.cybernaute.com/earthconcert2000/Aspartame.htm)

Aspartic acid is very dangerous to infants, whose nervous systems are still forming and have not developed a defense system as yet. Very similar to what we saw with DPT shots (Sanctity of Human Blood). It may not be wise to give your infant “diet” anything.

Phenylalanine is an amino acid necessary for brain function. In excess, phenylalanine lowers serotonin levels, causing depression. (Elsas)

Methanol is wood alcohol. In the 1920s when liquor was illegal, people would sometimes resort to wood alcohol, even though the dangers of blindness from doing so were well known. Methanol is a by-product of aspartame after aspartame breaks down in the small intestine, from the action of our enzyme chymotrypsin.

An additional problem with methanol is that it is then changed into formaldehyde in the body. Formaldehyde is a well-known neurotoxin and carcinogen, documented in every toxicology and pathology text ever written.

Researchers found out that digestion is not even necessary to break aspartame down into these three toxins. If the diet soda sits around in a room where temperature goes above 86° F, formaldehyde is produced. (Moser, p 42) Other researchers have correlated the neurotoxic components of Gulf War Syndrome with the boatloads of diet soda that sat around in the desert sun for weeks, at temperatures above 100° F. But such a thing happens every day in America in warmer climates. Soda delivery trucks aren't refrigerated.

Toxicity levels? The EPA has giving methanol as consumption limit of 7.8 mg per day. Problem is, a one liter bottle of diet soda contains 56 mg of potential methanol! (Monte)

How could something this toxic be approved by the FDA? That's simple. The demand. By 1986, Americans were drinking 20 billion cans of diet soda per year, all of it with aspartame. (Metzenbaum)
In 1987, Monsanto sold 8,500 TONS of aspartame, according to USDA figures. After that year, they refused to release production figures. But it's unlikely that production has gone down since then, considering all the foods that now feature aspartame. A partial list:

- diet soft drinks
- breakfast cereals
- puddings
- malt beverages
- pie fillings
- candy
- tea
- fruit juice concentrates
- baked goods
- frostings
- breath mints
- chewing gum
- coffee
- wine coolers
- yogurt

– Gold, p 9, 10

Then Monsanto found the real motherlode – chewable vitamins. Here is a partial list of the drugs and vitamins which now are flavored by the proven neurotoxin aspartame:

- Mylanta Natural Fiber Supplement, Sugar Free.
- Centrum, Jr vitamins
- Children’s TYLENOL acetaminophen Fruit Flavored Chewable Tablets
- Children’s TYLENOL acetaminophen Grape Flavored Chewable Tablets
- Children’s TYLENOL acetaminophen Cold Multi-Symptom Chewable Tablets
- Junior Strength TYLENOL acetaminophen Fruit Flavored Chewable Tablets
- PEDIA CARE Cold-Allergy Tablets for Ages 6 to 12
- PEDIA CARE Cough-Cold Tablets for Ages 6 to 12
- PEDIACARE Children’s Cold Relief Tablets
- TYLENOL Cold and Flu Hot Medication
- TYLENOL Cold and Flu No Drowsiness Formula Hot Medication
- Children’s Chewable CO-TYLENOL
- ALKA-SELTZER PLUS Night-time Cold Medicine
- ALKA-SELTZER PLUS Cold and Cough Medicine
- ALKA-SELTZER PLUS Sinus Allergy Medicine
- BUGS BUNNY Vitamin Products (ALL)
- FLINTSTONES Plus Calcium Multivitamin Supplement
- FLINTSTONES Complete Multivitamin Supplement
- FLINTSTONES Children’s Chewable Multivitamin
- DIMETAPP Cold and Allergy Chewable Tablets
- TEMPRA 3 Chewable Tablets, 80mg acetaminophen tablet
- TEMPRA 3 Double Strength Chewable Tablets, 160mg acetaminophen
- Zantac Efferdose
- SKAGGS ALPHA BETA Children’s Pain Reliever
- SHOP’N SAVE Children’s Non-Aspirin Pain Reliever
- KINNEY’S Children’s Chewable Non-Aspirin Pain Reliever
- PAY’N SAVE Children’s Chewable Non-Aspirin Pain Reliever
- PEOPLES Children’s Chewable Non-Aspirin Pain Reliever
- PIGGLY WIGGLY Children’s Chewable Non-Aspirin P.R.
- RITE AID Children’s Acetaminophen Non-Aspirin Pain Reliever
- Children’s Anacin-3 Chewable Tablets
- SUGAR FREE METAMUCIL
- ECKERD Sugar Free Natural Fiber Laxative
- LONGS Sugar Free Natural Vegetable Powder Laxative
- PAYLESS Sugar Free Natural Vegetable Powder Laxative
- RALEY’S Sugar Free Natural Vegetable Powder
- RITE AID Sugar Free Regular Flavor Nat.Veg. Bulk Powder
- SQUIBBCARE Sugar Free Natural Fiber Laxative
- THRIFTY Sugar Free Natural Vegetable Laxative
- HEALTH BALANCE Children’s Chewable Multivitamin
- ZOO CHEWS Animal-Shaped Chewable Multivitamin
- MEDIGUARD Children’s Multivitamin Supplement (Cherry, Orange and Grape)
- EQUATE Chewable Vitamins Animal-Shaped (with Iron)
- MEIJER CIRCUS SHAPES (Complete with Calcium, Iron and Minerals)
- MEIJER CIRCUS SHAPES (with Iron)
- ANIMAL SHAPES Chewable Vitamins Plus Extra C
- ANIMAL SHAPES Chewable Vitamins Complete
- ANIMAL SHAPES Chewable Vitamins With Iron
- REVCO Children’s Chewable Multivitamins
- LONGS Children's Chewable Multivitamin
- GRAY DRUG FAIR Children’s Chewable Multivitamin

Source: Use of Aspartame By Pharmaceutical Companies
Copyright 1996 Leading Edge Research

The above list can be verified by a trip to your local drugstore. The lowest example of bold-faced pandering that can be imagined is palming off known poisons to children by disguising them with cutesy names. Anybody see a correlation with the epidemic asthma levels cited above? What are we doing to our children?

This section is getting too long. The story of the politics and deceit behind the FDA approval of aspartame during the past 25 years is a classic in the usual format: poisons legislated into public use through sweetheart arrangements among manufacturers, legislators, and regulators, complete with the usual fraudulent research, hired-gun medical 'experts' proclaiming the safety of a proven toxin, etc. For the whole slimy tale, start with:

- Deadly Deception: The Story of Aspartame by Mary Nash Stoddard,


Don't miss the part about the Magic Rat. There was a famous investigation of all the research submitted to the FDA for aspartame's approval. The investigators wrote their findings in a document called the Bressler Report. The Magic Rat was a representation of the type of fraud uncovered by the Bressler Report. It seems there was one rat whose name was A23 LM. According to the Report: “that animal A23LM was alive at week 88, dead from week 92 through week 104, alive at week 108, and dead at week 112.”

Even Elvis couldn't do that.
Want to know how lame the FDA really is? After the Commissioner and several key lawyers and researchers who were investigating aspartame had accepted lucrative positions with Searle and Monsanto, the FDA had the temerity to come out with a statement like this in 1995:

"FDA has no further plans to continue to collect adverse reaction reports or monitor research periodically done on aspartame." (Thomas Wilcox, FDA branch chief, Food Chemical News 1995)

So who's going to monitor it then? The FBI?

Here's the bottom line with aspartame: it's too big to get rid of. Just because it's sweet doesn't mean it's a food. Aspartame is not a food; it's a manmade synthetic. Food additives aren't necessarily foods. Aspartame is the #1 food additive on the market. It is also a component of thousands of prescription and non-prescription drugs. We're talking billions and billions of dollars every year. It would take a boatload of Ralph Naders to stop this kind of trade.

What can you do? The only thing that matters anyway: protect the sanctity of your own blood. And that of your children.

I CAN QUIT ANY TIME

That's what everyone addicted to anything for the past 300 years has said. So do it. If you think you aren't addicted to white sugar, prove it. For 48 hours. Not only cokes, high fructose corn syrup fruit drinks, donuts and ice cream, but condiments, sauces, and aspartame drinks as well. 48 hours. Meet the monkey.

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