

Dear IMVA,

Below find a terribly important document that introduces The Hun Hordes of Mercury and Diabetes, which was published to the IMVA back in February. It is posted on the IMVA site. As stated below, diabetes is disabling, deadly and on the rise and in certain places has reached fifty percent of local populations. "Half of Texas children born after the year 2000 will develop diabetes," said Department of State Health Services Commissioner Dr. Eduardo Sanchez.[i] A wide (over 400-fold) variation exists in worldwide incidence rates of type 1 diabetes, with the highest occurring in Finland(over 45 per 100,000 under the age of 15 years).[ii] More than 100 million people worldwide are diabetic and this figure is expected to double within five years. And Type 2 diabetes, once called "adult onset diabetes," is stalking children, who at ages as young as five years old have developed Type 2 diabetes. The Medical Journal of Australia has recently stated that the rise in childhood diabetes among boys under four is rising 4.6 per cent on average each year.

Every 30 seconds a leg is lost due to diabetes in the world.

One of the great problems with diabetes is that it can go silently undetected for a long time without symptoms. Many people first become aware that they have diabetes when they develop one of its potentially Life- threatening complications -- such as heart disease, blindness and nerve disease. So awareness of diabetes and what is causing the epidemic is vital and becoming more so with each passing year, yet the western medical establishment has its head stuck in the sand refusing to see what is clearly being laid bare for anyone with eyes to see.

Medical fascism is a reality that is preventing families of autism spectrum disorders from receiving the full backing and support of the medical community. It is also sabotaging awareness of the principle causes of diabetes. Hun Hordes of Mercury and Diabetes unveiled everything from sugar to mercury and we shall see below that even chemicals intentionally added to our food supply like MSG and aspartame are leading both children and adults to the dramatic rise in obesity that so much lies at the heart of diabetes.

What follows is a medical review of the literature detailing the different chemicals that are strongly associated with or scientifically proven to be direct causes of diabetes. It does mention mercury but the details of that are left for Hun Hordes of Mercury to describe. The implications are stupendous and the government's role malevolent.

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P.S. Will try to get the last sections of the water series out in the next week.

Diabetes and Chemical Poisoning
International Medical Veritas Association
(Parts extracted from The Hun Hordes of Mercury)

The number of U.S. adults with diagnosed diabetes, including women with gestational diabetes (diabetes that develops during pregnancy), has increased 61% since 1991.

CDC[iii]

The CDC says that diabetes is disabling, deadly and on the rise. The incidence of diabetes is skyrocketing not only in adults but in the juvenile population as well. Healthcare experts have called the alarming rise in diabetes and its related complications “an epidemic” that threatens to spiral out of control. In 1997 15.7 millions adults in the United States were reported to have diabetes.[iv] By the year 2002, this number had already swelled to 18.0 million or 8.7% of all adults.[v] Diabetes and its complications now claim hundred of thousands of lives in the U.S. each year, incurring total expenses of over \$130 billion in direct and indirect costs to the healthcare system.[vi] Worldwide, the number of people with adult-onset diabetes is predicted to explode in the next 10 years, doubling to an estimated 221 million people.[vii] By contrast only 43,171 people in the United States were diagnosed with AIDS and only 18,017 died.[viii]

If we add the number of heart related deaths caused by diabetes to the diabetes statistics we actually find that diabetes is the biggest killer in the United States. This means that the above statistics understate the problem. Thus it would help a lot of people if we could isolate a basic cause for this disease. Though there are several important causes/factors contributing to the dramatic rise in diabetes but the primary cause has eluded scientists and doctors - meaning a cure to diabetes has not been found. This medical review shifts the focus away from typical diabetic etiologies and suggests we concentrate on causes that can quickly bring on diabetes through intense chemical exposure or slowly through decades of low level chronic exposure to common chemicals found in the environment, in the water we drink and in the foods we eat.

Diabetes, which had a per capita incidence of 0.0028% at the turn of the century, had by 1933, zoomed 1000% to become a disease faced by many doctors.

“A growing number of children are visiting pediatric cardiologists to treat their high cholesterol, or seeing endocrinologists to keep their diabetes in check. In short, kids are "catching" the diseases that kill most adults,” wrote Krista Ramsey of the Cincinnati Enquirer. "The picture has been on the wall, but we've just refused to see it," said Dr. Larry Fox, medical director of the Northeast Florida Pediatric Diabetes Center in Jacksonville, Fla. "We have to realize that the kidney disease and heart disease we used to see in people in their 50s and 60s - who developed Type II diabetes in their 40s - we're now going to see in people in their late 20s and 30s. If we don't do something about it, our grandchildren are going to go blind in their 20s.”

There is an alarming rate of low blood sugar occurring in children at night.

Some doctors are now saying that diabetes is a "seizure disorder" because children are having so many seizures from low blood sugars, the kinds of seizures that cause cognitive changes in the brain of developing children. MD's are telling parents to expect these seizures, and that they are part and parcel of diabetes. But they are putting children on antiseizure medicine instead of doing something more fundamental to address the cause of the problem. According to the Children's Hospital of Philadelphia as many as one in five children with newly diagnosed type 2 diabetes may also have a neuropsychiatric disorder.[ix] The illnesses include depression, attention-deficit hyperactivity disorder, autism, developmental delay, schizophrenia, and bipolar disorder. New research suggests that children with a neuropsychiatric disease may be at risk for type 2 diabetes, and vice versa. "Our findings may be important in screening practices for children with either of these conditions," said the study's leader, pediatric endocrinologist Lorraine E. Levitt Katz, M.D.

The development of insulin-dependent diabetes mellitus is thought to be dependent on the interaction of environmental agents with the pancreatic beta cells.[x]

University of Calgary

Doctors have to seriously entertain the plausibility that a large percentage of the new cases of diabetes is actually being caused by chemical poisoning. In volume 18 of *Clinical Toxicology* in 1981[xi] there was a write up about cases of suicide attempts using rat poisoning where all four cases showed hyperglycemia and ketosis. The authors concluded that ingestion of rodenticide can cause diabetes mellitus after they noticed that the onset of diabetes mellitus varied within a very short period of time after swallowing of the poison – only 4 to 7 days.

Every parent should know that sodium fluoride supplements are often fed to little children to prevent tooth decay. They are drugs requiring a dentist's or physician's prescription. Sodium fluoride was on the market pre-1938, but not to stop cavities and not for any medical reason. Sodium fluoride was originally sold as a rat poison and is only on the market because it was grandfathered in by the FDA. Sodium fluoride does not have FDA approval and has never been tested but is still given to children.[xii]

Metals such as iron, mercury, arsenic, lead, fluoride and possibly aluminum may play a role in the actual destruction of beta cells through stimulating an auto-immune reaction to them after they have bonded to these cells in the pancreas.

Medical science has discovered how sensitive the insulin receptor sites are to chemical poisoning. Patients treated with the atypical anti-psychotic agents clozapine and olanzapine are showing increased risk for insulin resistance according to a study published in the January 2005 issue of *The Archives of General Psychiatry*, one of the *JAMA/Archives* journals. "Psychiatrists and primary care professionals should be aware that patients treated with clozapine and olanzapine may be at increased risk for insulin resistance, even if not obese. Insulin resistance is associated with hyperlipidemia, hypertension, and cardiovascular disease and over time may increase the risk for diabetes mellitus in vulnerable individuals."[xiii]

Exactly a year earlier the American Diabetes Association, the American Psychiatric Association, the North American Association for the Study of Obesity, and the American Association of Clinical Endocrinologists made a similar announcement warning people to be careful to watch for signs they are developing diabetes, obesity or high cholesterol if they are taking Abilify, Clozaril, Geodon, Risperdal, Seroquel or Zyprexa.[xiv] The FDA has already requested that Eli Lilly and Company update its product labeling for Zyprexa to include black box warnings about hyperglycemia and diabetes. Additionally, the British Medical Control Agency and the Japanese Health and Welfare Ministry have both warned about the risk of diabetes in patients who are prescribed Zyprexa. In 2002, a study at Duke University showed a connection between Zyprexa and diabetes. This study documented nearly 300 cases of diabetes in people using Zyprexa. The pharmaceutical industry and particularly Eli Lilly are in serious trouble as lawyers announced the first nationwide class action lawsuit against Eli Lilly and Company on behalf of all persons residing in the United States who used Zyprexa.[xv]

Organic chemical Pentachlorophenol (PCP) was used in the timber industry for years as a cheap treatment for sapstain, a fungal infection commonly found in softwoods such as pine. Some of the more chronic health effects, including cancer and diabetes, do not appear until long after exposure. [xvi]

Researchers from the Department of Internal Medicine, National Taiwan University Hospital[xvii] found, “The association between arsenic exposure and diabetes mellitus is a relatively new finding. Up to now, there are six epidemiologic reports linking diabetes mellitus with arsenic exposure from environmental and occupational sources. Two reports in Taiwan carried out in the blackfoot disease-hyperendemic villages, one cross-sectional and one prospective follow-up of the same cohort, indicate that arsenic exposure from drinking artesian well water is associated with prevalence and incidence of diabetes mellitus in a dose-responsive pattern. The observation of the relation between arsenic exposure and diabetes mellitus is further supported by studies carried out in Sweden and Bangladesh. In Sweden, case-control analyses of death records of copper smelters and glass workers revealed a trend of increasing diabetes mellitus with increasing arsenic exposure from inhalation. In Bangladesh, prevalence of diabetes mellitus among arsenic-exposed subjects with keratosis was about five times higher than unexposed subjects.”

Arsenic exposure is a risk factor for diabetes mellitus.[xviii], [xix] Inorganic arsenic is considered one of the prominent environmental causes of cancer mortality in the world. Arsenic is a human carcinogen linked to liver, lung, skin, kidney, bladder, and prostate cancers. It can also cause neurological, cardiovascular, gastrointestinal, and immune system abnormalities. The feeding of arsenic to chickens in the United States releases hundreds of tons of arsenic into the environment every year in the form of poultry manure, which is spread on fields as fertilizer.

Chicken consumption may contribute significant amounts of arsenic to total arsenic exposure of the U.S. population.[xx]

The Journal Environmental Health Perspectives

According to Dr. Ellen Silbergeld, a researcher from the Johns Hopkins School of Public Health, the poultry industry's practice of using arsenic compounds in its feed is something that has not been studied: "It's an issue everybody is trying to pretend doesn't exist."^[xxi] "Arsenic acted as a growth stimulant in chickens—develops the meat faster—and since then, the poultry industry has gone wild using this ingredient," says Donald Herman, a Mississippi agricultural consultant and former Environmental Protection Agency researcher who has studied this use of arsenic for a decade.

At mean levels of chicken consumption (60 g/person/day), people may ingest 1.38-5.24 microg/day of inorganic arsenic from chicken alone. At the 99th percentile of chicken consumption (350 g chicken/day), people may ingest 21.13-30.59 microg inorganic arsenic/day and 32.50-47.07 microg total arsenic/day from chicken.^[xxii] The National Institutes of Health and the U. S. Department of Agriculture's Food Safety Inspection Service recently reported alarmingly high levels of arsenic contamination in the flesh of "broiler chickens" raised for meat greatly exceeded the Environmental Protection Agency's new upper safety limit of arsenic allowed in drinking water. In fact, the amount of arsenic found in chicken was 6 to 9 times that allowed by the EPA. A "bucket" of KFC fried chicken would be expected to have up to almost 50 times the amount of arsenic allowed in a glass of water.^[xxiii]

The use of chlorides to bleach flour is an industry standard. This should be a criminal practice since the cause-and-effect of alloxan on pancreatic tissue is axiomatic in biochemistry.

The Idaho Observer

Studies show that alloxan, the chemical that makes white flour look "clean" and "beautiful," destroys^[xxiv] the beta cells of the pancreas. Scientists have known of the alloxan-diabetes connection for years; in fact, researchers who are studying diabetes commonly use the chemical to induce the disorder in lab animals.^[xxv] Unfortunately, most consumers are unaware of alloxan and its potentially fatal link to diabetes because these facts are not well publicized, are hidden by FDA approval, and certainly doctors and the food industry are not informing parents that they and their children are being poisoned by white flour containing alloxan.

Alloxan-induced diabetes of 4 days duration produced metabolite changes in brain compatible with severe reduction in cerebral metabolism.^[xxvi]

Mercury is the most potent enzyme inhibitor^[xxvii] that exists; it is in a class of its own and well deserves its title as the most toxic non-radioactive element. It is because mercury and lead attach themselves at these highly vulnerable junctures of proteins that they find their great capacity to provoke biochemical shifts and then morphological changes in the body. Transsulfuration pathways in the body are fundamental for life. When mercury blocks thiol groups cellular proteins lose their reactive properties, lose their ability to carry out their routine function. Because glycemic regulation is one of the body's most central homeostatic mechanisms, mercury's attack is most problematic, even at low concentrations, and indicates that it is playing a great role in the dramatic rise in diabetes.

Thiol poisons, especially mercury and its compounds, reacting with SH groups of proteins lead to the lowered activity of various enzymes containing sulfhydryl groups. This produces a series of disruptions in the functional activity of many organs and tissues of the organism.

Professor I.M. Trakhtenberg[xxviii]

Mercury is so dangerous because it is collapsing/damaging critical sulfur-containing cross-linkages which change the geometry of both insulin receptor sites and insulin itself. Thimerosal is mixed with aluminum in the vaccine and if anyone ever wanted to discover the ultimate chemical destructor they do not have to look far beyond this. Insulin has three Sulfur-containing cross-linkages and the insulin receptor has a tyrosine kinase-containing sulfur bond, which are the preferred targets for binding by mercury and lead. Should mercury attach to one of these three sulfur bonds it will interfere with the normal biological function of the insulin molecule.

Cadmium, an environmental pollutant[xxix] accumulates in the pancreas and exerts diabetogenic effects in animals. In a large cross-sectional study, urinary cadmium levels are significantly and dose-dependently associated with both impaired fasting glucose and diabetes.[xxx]

Fluoride is implicated in the growing epidemic of diabetes. Fluoride seems to take on a greater toxicity in diabetics.[xxxi] Dr M A Roshal, in a 1965 issue of the journal issued by the Leningrad Medical Institute, reported that intake of fluoride - even at the apparently "safe" concentration of 1.0 part per million - caused derangements in blood sugar balance.[xxxii] Scientists have found that a single oral administration of triphenyltin fluoride (TPTF) to rabbits induces transient diabetes and diabetic lipemia by inhibiting insulin secretion from morphologically normal pancreatic B-cells.[xxxiii] Other studies have found that TPTF inhibits insulin release from rabbit islets, subsequently inducing diabetic lipemia due to the insulin deficiency.

Furthermore, it is possible to provide a new animal model for diabetes and diabetic lipemia by administration of TPTF to rabbits.[xxxiv] People with nephropathic diabetes can exhibit a polydipsia-polyurea syndrome that results in increased intake of fluoride, along with greater-than-normal retention of a given fluoride dosage. People with inadequate dietary intakes are also likely to be more at risk as a consequence of low-dose long-term fluoride ingestion. Evidence is presented, showing that there has been an escalation in daily fluoride intake via the total human food-and-beverage chain, with the likelihood that fluoride is playing a major role in the diabetes epidemic. Persons in poor health and those who have allergy, asthma, kidney disease, diabetes, gastric ulcer, low thyroid function, and deficient nutrition are especially susceptible to the toxic effects of fluoride in drinking water.

“With the public concern over childhood obesity and diabetes, few are being told of the overwhelming evidence that early exposure to excitotoxins (as found in aspartame and monosodium glutamate) consistently produce gross obesity and insulin resistant diabetes, just as we are seeing in our youth. The promoters of aspartame use have been lying from the beginning and continue to use their money and political clout to cover up the real and present dangers of this toxic product,” says Dr. Russell L. Blaylock. Diabetes has been induced in hamsters with monosodium glutamate (MSG).[xxxv]

Neuronal necrosis is easily induced in 1-day-old Chinese hamsters by the administration of MSG. Animals exposed to MSG were found to be short, grossly obese, and had difficulty with sexual reproduction. One can only wonder if the large number of people having difficulty with obesity in the United States is related to early exposure to food additive excitotoxins since this obesity is one of the most consistent features of the syndrome. We know that the hypothalamus is very immature at birth. The damage to this structure of the brain by MSG leads to severe endocrine problems later in life, among them decreased thyroid hormone, increased tendency toward diabetes, and higher cortisone levels than normal. A child consuming a soup containing MSG plus a drink with NutraSweet® will have a blood level of excitotoxins six times the blood level that destroys hypothalamus neurons in baby mice. The younger the child, the greater the danger to the brain.

The diseases caused by Agent Orange that are officially recognized range from a long list of cancers to various neurological conditions and even diabetes. Agent Orange is known to contain dioxin, which is thousand times more toxic than arsenic.[xxxvi]

Most of today's pharmaceutical preparations, because of their harmful effects, may be labeled poisonous," says chemist Dr Lisa Landymore-Lim, who has worked for the National Institute for Medical Research, London, and the Dunn Nutrition Unit, Cambridge. Her 1994 book, *Poisonous Prescriptions*, describes Landymore-Lim's investigations which have found that diabetes may in fact be a major side effect of antibiotics and other common pharmaceuticals. The book provides evidence from studies and hospital records. Diabetes, usually thought to be largely a genetic disorder, may actually have increased so much in the last 50 years due in large part to the proliferation in the use, and over-use, of medicines.

Diabetes has been increasing sharply among children over the past decade and so have environmental poisons. Because the CDC and the FDA and almost every major medical organization refuses to address chemical poisons in the environment as the main cause of diabetes and other chronic diseases effective treatments remain largely unknown and will never be known as long as the present allopathic paradigm remains in place. At this point doctors and health care officials have to be blind, deaf and dumb to not make the connection between chemical poisons and diabetes.

CASE STUDIES:

When I was six years old I remember being fascinated with the thermometers my mother used when I was sick. The thermometer had that silver liquid that flowed in it, and I did not know anything about it being poisonous. But I do remember breaking one on purpose to investigate the mercury, and playing with it as a child. I never told my mother because of the fact I broke one of her thermometers, but if it is true it causes major damage for insulin receptors and production I may have doomed myself as a child by playing with the mess in the thermometer my mother used that I broke. I was six, and that was the year I came down with insulin dependent diabetes. I may be at fault for my own disease. I vividly remember doing this as a child because I was fascinated with it and so much more in the world. What a dangerous thing to give a child access to, even through what seems a simple thermometer. I had in my hands a lot more than a pin head of

mercury! Might as well have walked into a nuclear reactor with no protection whatsoever considering what I did. I really screwed my body up with that thermometer. DJ

I was diagnosed juvenile diabetic at 14 years, am 49 now, male, married with 3 kids. In all these years nobody has ever asked me to explain my problems that deal with mercury. The eyes roll and head shake sums it up most of the time I bring it up. When I was 5 years old a silver amalgam filling was put in an incisor tooth. That baby tooth fell out when I was about 10 years old. The next day when I woke up I was shocked at how well I felt and I didn't have a clue as to why. Later that morning I saw that tooth and the silver filling and I thought, would anybody put poison in a little kid's mouth. I thought no, and forgot about it. Soon my speech straightened out, I could think clearly, I wasn't dizzy all the time, I quit urinating a lot and I felt I wasn't holding it all the time. About 6 months after this filling fell out another bigger silver amalgam was put in. Within a few days I was urinating at school and I thought to myself, its back. I knew there was something bad in silver amalgams but didn't want to believe it, so I forgot about it. When I was 13 years old, 9 silver amalgams were put in my mouth. Something bad happened when the last filling was put in my mouth, on the walk home I thought to myself, I'm screwed and life as I knew it is over. I thought nobody would believe me and nobody did. About a year later I was a diagnosed juvenile diabetic. Terry

[i]

<http://www.dailytexanonline.com/media/paper410/news/2005/04/18/TopStories/State.Recognizes.Need.For.Diabetes.Prevention.Plan-927680.shtml>

[ii] Silink, Martin. Childhood Diabetes: A Global Perspective. Institute of Endocrinology, The Children's Hospital at Westmead, Sydney, Australia *Hormone Research* 2002;57:1-5 (DOI: 10.1159/000053304)

[iii] CDC http://www.cdc.gov/nccdphp/aag/aag_ddt.htm

[iv] American Diabetes Association: Diabetes Facts and Figures [factsheet online] 1997 [cited August 1999][16 screens]. Available from: URL: <http://www.diabetes.org/ada/c20f.asp>

[v] CDC. http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2003.pdf

[vi] Brancati FL, Wang NY, Mead LA, Liang KY, Klag MJ. Body weight patterns from 20 to 49 years of age and subsequent risk for diabetes mellitus. *Arch Intern Med* 1999;159:957-963.

[vii] Kopelman PG, Hitman GA. Exploding type II [correspondence]. *Lancet* 1998;352:SIV5.

[viii] HIV/AIDS Surveillance Report 2003;15.

[ix] Press Release Source: The Children's Hospital of Philadelphia. Psychiatric Illnesses Are Common in Children With Newly Diagnosed Type 2 Diabetes Monday June 20, 10:18 am ET

[x] Yoon, JW et al. Effects of environmental factors on the development of insulin-dependent diabetes mellitus. Department of Microbiology and Infectious Diseases, Julia McFarlane Diabetes Research Unit, University of Calgary, Alberta, Canada. *Clin Invest Med.* 1987 Sep;10(5):457-69.

[xi] Gallanosa, AG, Spyker DA, Curnow, RT. *Clinical Toxicology*, Vol 18. No.4, pages 441-449, 20 references, 1981 Diabetes Mellitus Associated with Autonomic and Peripheral Neuropathy After Vacor Rodenticide Poisoning: A review

[xii] FDA: Drugs on the market prior to enactment of the 1938 law were exempted, or "grandfathered", and manufacturers were not required to file an NDA. The premise was that all pre-1938 drugs were considered safe, and if the manufacturer did not change the product formulation or indication, then an NDA was not required. However, once a manufacturer made any change to a pre-1938 drug, that drug was considered by the FDA to be a "new drug" and the manufacturer was required to prove that the drug was safe for its intended use.
<http://www.suite101.com/article.cfm/11749/107324>

[xiii] Arch Gen Psychiatry. 2005; 62: 19 – 28.

[xiv] Journal Diabetes Care. February 2004

[xv] A lawsuit was filed on April 16, 2004 in the United States District Court for the Eastern District of New York. In December of 2004 a federal judge has told Eli Lilly and Co. to be ready for trial within a year to defend its star drug Zyprexa against charges in federal court that the drug causes diabetes.

[xvi] <http://www.wsws.org/articles/2002/aug2002/swap-a19.shtml>

[xvii] Tseng CH, Tseng CP, Chiou HY, Hsueh YM, Chong CK, Chen CJ. Epidemiologic evidence of diabetogenic effect of arsenic. Toxicol Lett. 2002 Jul 7;133(1):69-76.

[xviii] Mahfuzar Rahman et al. Division of Occupational and Environmental Medicine, Department of Health and Environment, Faculty of Health Science Linkoping University Sweden. Department of Occupational and Environmental Health(DOEH), National Institute of Preventive and Social Medicine (NIPSOM), Mohakhali, Dhaka-1212 Bangladesh. American Journal of Epidemiology 1998; Vol. 148, No.2: 198-203 The crude prevalence ratio for diabetes mellitus among keratotic subjects exposed to arsenic was 4.4 (95% confidence interval 2.5-7.7) and increased to 5.2 (95% confidence interval 2.5-10.5) after adjustment for age, sex, and body mass index.

[xix] Momplaisir GM, Rosal CG, and Heithmar EM, "Arsenic Speciation Methods for Studying the Environmental Fate of Organoarsenic Animal-Feed Additives," U.S.EPA, NERL-Las Vegas, 2001; (TIM No. 01-11).

[xx] <http://www.ehponline.org/docs/2003/6407/abstract.html>.

[xxi] Vandiver J, "Chicken Feed," Daily Times (Salisbury, Md.), January 4, 2004.

[xxii] Lasky T, Sun W, Kadry A, Hoffman MK. Mean total arsenic concentrations in chicken 1989-2000 and estimated exposures for consumers of chicken. Office of Public Health and Science, Food Safety and Inspection Service, U.S. Department of Agriculture, Washington, DC, USA. [xxiii] One KFC bucket contains 3 legs, 3 breasts, 3 wings, and 3 thighs [http://cspinet.org/new/pdf/letter_to_ftc.pdf] weighing a total of 1,176 grams [http://www.yum.com/nutrition/documents/kfc_nutrition.pdf] and containing up to 108.5 micrograms of inorganic arsenic [Environmental Health Perspectives 112 (2004): 18] exceeding the EPA limit on an 8 ounce glass of water by a factor of 48.4 [EPA 815-Z-01-001].

[xxiv] Animal experiments have shown that animals which have their Beta cells destroyed by alloxan are able to regenerate Beta cells after a few months when taking GS, an herb grown in

India. The Beta cell is the cell that produces insulin. Diabetics needing insulin treatment (Type 1) have been able to decrease their insulin after GS therapy.

[xxv] Wojtowicz, Z. et al. Serum total cholesterol, triglycerides and high density lipoproteins (HDL) levels in rabbit during the course of experimental diabetes. Department of Human Anatomy, Skubiszewski Medical University of Lublin. Ann Univ Mariae Curie Sklodowska [Med]. 2004;59(2):258-60

[xxvi] Thurston, JH. Et al. J Biol Chem. 1975 Mar 10;250(5):1751-8. Effects of alloxan diabetes, anti-insulin serum diabetes, and non-diabetic dehydration on brain carbohydrate and energy metabolism in young mice.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=1112828&dopt=Citation

[xxvii] Various molecules or atoms will affect the rate of an enzyme catalyzed reaction by binding to the enzyme. Some bind at the same site as the substrate (the active site) and prevent the substrate from binding. Others bind at sites on the enzyme remote from the active site and affect activity by modifying the shape of the enzyme. Many of these molecules reduce the activity of the enzyme and are referred to as inhibitors.

[xxviii] Trakhtenberg, I.M. From Russian translation. Chronic Effects of Mercury on Organisms. In Place of a Conclusion

[xxix] Cadmium:Sources: Tap water, fungicides, marijuana, processed meat, rubber, seafood (cod, haddock, oyster, tuna), sewage, tobacco, colas (especially from vending machines), tools, welding material, evaporated milk, airborne industrial contaminants, batteries, instant coffee, incineration of tires/rubber/plastic, refined grains, soft water, galvanized pipes, dental alloys, candy, ceramics, electroplating fertilizers, paints, motor oil and motor exhaust.

[xxx] Urinary cadmium, impaired fasting glucose, and diabetes in the NHANES III Pathophysiology/ Complications - National Health and Nutrition Examination Survey Diabetes Care, Feb, 2003

[xxxi] Ref: Fluoride 1997; 30(1):43-50. Toxicity of fluoride to diabetic rats; by Priya CATB, Anitha K, Mohan EM, Pillai KS, Murthy PB

[xxxii] The Question of Fluoridation, by J. R. Marier, Ottawa, Canada. [xxxiii] Ref: Recent progress in the study of analytical methods, toxicity, metabolism and health effects of organotin compounds by Wada O, Manabe S, Iwai H, Arakawa Y. Sangyo Igaku 1982 Jan;24(1):24-54.

[xxxiv] Triphenyltin fluoride (TPTF) as a diabetogenic agent. TPTF induces diabetic lipemia by inhibiting insulin secretion from morphologically intact rabbit B-cell by Manabe S, Wada O. Diabetes 1981 Dec;30(12):1013-21.

[xxxv] Komeda K, Yokote M, Oki Y. Experientia. 1980 Feb 15;36(2):232-4. Related Articles, Links

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[xxxvi] <http://joongangdaily.joins.com/200509/07/200509072146122339900091009101.html>