When I first read House Resolution 327 not only was I angered at the blatant misinformation being presented, I could barely believe that anyone could write something claiming to be fact without any reference of proof as back up. I was asked to refute each claim so that the reader could understand why each statement is false with the hope that those supporting the document be properly educated and toss it into the shredder where it belongs.

What follows is many months of hard work to assist the reader to understand why HR 327 should not be permitted to be voted on as a legitimate document. So allow me to go through each of the false statements in said document so that truth and fact can be restored once again to the Republic.

**Whereas the contributions of Louis Pasteur and Edward Jenner to the discovery of the principles of vaccination and immunology are among the most consequential health findings in human history;**

I will agree these health findings were consequential. Consequential for the millions of dead and maimed people and animals created by the blind dissemination of vaccines.

Louis Pasteur was a plagiarist and a fraud as multiple books have shown including the private lab notes of Louis Pasteur himself exposed by Dr. Gerald L. Geison of Princeton University.

>“Dr. Geison is one of the few historians of science to base research on laboratory notebooks. In Pasteur’s case, the research turned up serious discrepancies between his publications and public statements and what he recorded in his notebooks. But this is not the only example of scientists and historians as well as investigative journalists beginning to shatter myths about crucial discoveries and those who made them. The disclosures are revealing that science is not as objective, neat and scrupulously honest as it is portrayed.”

It was actually the work of Antoine Béchamp, a true scientist and unbiased researcher, that Pasteur, one who made favours and purchased his medical degree, rivalled against and plagiarized for years, all the way from fermentation methods to the study of silk worms to the understanding of the nature of disease. Pasteur followed Béchamp like a puppy and stole his thunder, each and every time.

Louis Pasteur used his prestige as a Government representative to brow-beat others into supporting him. It took a lot of time but he worked diligently to be widely recognized, while every chance he got, tossing Béchamp under the proverbial bus. Meanwhile, Béchamp's claims as to the discoveries on silkworm diseases were ignored, which could have stopped the entire parasite infestation that no one else could figure out at the time. In fact, Pasteur knew so little, he didn't even realize that the cocoon held the silkworms inside! The majority of those who knew that his claims were false were afraid to oppose anyone who was so close to Napoleon, and who had so much official standing as Pasteur then had. In his book on the diseases of silkworms, Pasteur takes all the credit. Meanwhile, the silkworms kept dying, while the successfully tested creosote cure by Béchamp was not only ignored, Pasteur actually belittled the idea.

This is only one small example. Ethel Hume goes on to show that his treatment for rabies and his anthrax serum were the same colossal failures and scientific fraud. This is verified in Dr. Geison’s book, as well.

Dr M. L. Leverson, an American physician, discovered some of Professor Béchamp’s writings in New York and immediately realized that they anticipated Pasteur in certain important points. He then went to France and met Professor Béchamp, heard the story of the plagiarism from him, after which he did a great deal to bring Béchamp’s work to public attention.
Ethel Hume quotes Dr. Leverson in her book:

“The Danger of Inoculating.

After discussing the practice of medicine in the past and saying that since Jenner’s and Pasteur’s days the modern effort is to make the sick well, he says of inoculations: “When a drug is administered by the mouth, as was beautifully pointed out by Dr J. Garth Wilkinson, in proceeding along the alimentary canal it encounters along its whole line a series wherein it is analysed, synthesized, and deleterious matter prepared for excretion, and finally excreted, or it may be ejected from the stomach, or overcome by an antidote. But when nature’s coat of mail, the skin, is violated, and the drug inserted beneath the skin, nature’s line of defence is outflanked, and rarely can anything be done to hinder or prevent the action of the drug, no matter how injurious – or even fatal – it may be. All the physicians of the world are incompetent either to foresee its action or to hinder it. Even pure water has been known to act as a violent and foudroyant poison when injected into the blood stream. How much more dangerous is it, then, to inject poisons known to be such, whether modified in the fanciful manner at present fashionable among vivisectionists or in any other manner. These simple considerations show that inoculation should be regarded as malpractice to be tolerated only in case of extreme danger where the educated physician sees no other chance of saving life.”

Now onto the next medical tyrannical fraud, Edward Jenner, also known as “Fast” Eddy Jenner who caused small pox out breaks with his small pox injections that were killing people and leading to the spread of disease on a large scale.

Jenner set up practice as a “surgeon” in Berkeley in the 1700s but he, in fact, did not earn the title of “doctor” at all. Jenner’s history is actually quite amusing. Dr Walter Hadwen, JP, MD, LRCP, MRCS, LSA., explained during an address in 1896:

“Now this man Jenner had never passed a medical examination in his life. He belonged to the good old times when George III was King— (laughter)—when medical examinations were not compulsory. Jenner looked upon the whole thing as a superfluity, and he hung up “Surgeon, apothecary,” over his door without any of the qualifications that warranted the assumption. It was not until twenty years after he was in practice that he thought it advisable to get a few letters after his name. Consequently he then communicated with a Scotch University and obtained the degree of Doctor of Medicine for the sum of £15 and nothing more. I (Laughter.) It is true that a little while before, he had obtained a Fellowship of the Royal Society, but his latest biographer and apologist, Dr. Norman Moore, had to confess that it was obtained by little less than a fraud. It was obtained by writing a most extraordinary paper about a fabulous cuckoo, for the most part composed of arrant absurdities and imaginative freaks such as no ornithologist of the present day would pay the slightest heed to. A few years after this, rather dissatisfied with the only medical qualification he had obtained, Jenner communicated with the University of Oxford and asked them to grant him their honorary degree of M.D., and after a good many fruitless attempts he got it. Then he sent to the Royal College of Physicians in London to get their diploma, and even presented his Oxford degree as an argument in his favour. But they considered he had had quite enough on the cheap already, and told him distinctly that until he passed the usual examinations they were not going to give him any more.” – Dr Walter Hadwen, 18961 (emphasis added)

While certainly there are individuals who are not formally trained who are brilliant scientists and researchers, sadly this
man was not one of them. So yes, vaccination began with an utterly unscientific superstition unverified by any legitimate evidence at all and propagated by the local English dairymaids to one self-confident crank named Edward Jenner, a medical fraud who bought his credentials for fifteen pounds.

Sadly the milkmaid story is a lie invented by John Baron, Jenner’s friend and first biographer. Jenner himself never claimed to have discovered the value of cowpox, nor did he ever say, despite a huge volume of correspondence, how he first came across the idea. The myths of the milkmaids are just that, myths. To modern eyes, Jenner is revered for eradicating smallpox by using cowpox; in his lifetime, however, Edward Jenner faced severe criticism from jealous competitors and from many ordinary doctors who did not trust his method because, unlike inoculation, it did not give permanent immunity to smallpox. John Baron invented the milkmaid story to counteract these criticisms.¹⁰

Dr. Hadwen writes from "Truth," January 3, 1923:

> "Jenner’s idea was based solely upon a dairymaid’s superstition. He sought to give it a scientific air by calling cowpox (a disease which bears no analogy to smallpox) variolae vaccinae—i.e., smallpox of the cow. The Latin name was not without its effect, and anything that promised less harmful results than the prevailing practice of the direct inoculation of smallpox matter (which had been killing people by hundreds, and afterwards had to be forbidden by Act of Parliament) was acceptable at the time to the frightened and gullible population. The rest was an affair of influence. When once an error is accepted by a profession corporately and endowed by Government, to uproot it becomes a herculean task, beside which the entrance of a rich man into the Kingdom of heaven is easy.”

So it seems we have history repeating itself once again, by evidence of this enormous error regurgitated into this presumed HR 327, accepted blindly by many professions and endowed by Government. I suppose our task of truth is indeed, herculean.

It is important to understand the difference between natural inoculation or natural exposure and vaccination. Daniel Sutton in the 1700s was using the method of inoculation (lancing the skin with infectious material and nothing more) with variollae aka pox and was seeing reductions of people getting the full blown small pox disease, which is in the same family as the chicken pox. The skin, being a strong agent of the immune system, would be able to formulate a natural response, and the next time it was exposed would have redness at the site, denoting an immune response. However, other practitioners were attempting Sutton’s methods and having huge failure rates. Clearly Sutton’s method was far more subtle and nuanced, much like giving a homeopathic preparation. Jenner also did similarly but moved forward into injection into the muscle of the body which would cause outbreak and death.

So why was correct inoculation (superficial wounds only and low dose) working but not vaccination or inoculation that was done too deeply or too much? It's the exact same reason parents would take their young children to expose them to the chickenpox when a neighbours kid had it. The exposure was controlled and at a time of robust nutrition so they would be able to have life long, natural immunity. So this SPECIFIC parasitical agent, arguably a normal exanthem of childhood, that they have deemed a virus, of which we can only view the “virion”, lives on the skin during normal infection, can be experienced with exposure or skin inoculation (opening the skin and forcing an infection) which lends natural immunity primarily because the detoxification task it was meant for has been accomplished. So just as we understand now, as they understood then, if you can control the skin exposure and expose that person in a time where they would be nutritionally strong, immunity for life would be created and only a mild form of the disease would express. Basically Sutton was going into communities to create a community wide pox party. Yet again, however fools will be fools and the vaccine industry seems very confused about the differences between natural exposure or a naturally mimicking inoculation and vaccine injections which by-pass the skin level immune system, the toxicity of the vaccine ingredients, aside.

Then we have the very question of disease causation itself. How can a House Resolution pass when there is still
question regarding the root of disease itself? If the authors of this document choose to simply ignore the entire other half of the discussion, how can it dare consider it's statements legitimate?

“The Rife Universal Microscope, developed in the late 1930's and early 1940's, clearly established that germs (microorganisms) are the result of disease (scavengers of dead cells) rather than the cause thereof. If germs are involved, they arise as primary symptoms of that general condition. Though germs don't cause disease, secondary symptoms are produced in response to their activity (commonly called the disease). One reason the conventional medical community doesn't see the big picture is their means of looking at it. A lot depends on how you look at it and what you look at it with.”

Dr. Stephan Lanka, a German biologist, has been publicly expressing for decades how viruses do not exist and do not cause disease. That the germ theory, which has been proven false by means of the erroneous Koch’s postulates, was used as a means for business, and is not based on valid science.

An error turned into a fraud, a fraud turned into a crime and a crime into an industrialization of madness. It began in ancient Greece, where the idea of infection came about. Dr. Stephan Lanka has proved in a Supreme Court of law via appeal that the measles virus does not exist. If this disease has been proven to not be caused by a virus, then the measles vaccine is purely medical fraud. Is this Government an agent of fraud that could be challenged in a court of law? Seems a very risky measure to be taken.

Whereas vaccines have made it possible for the world to have eradicated smallpox, saving approximately 5 million lives annually, and for the international community to be on the brink of eradicating polio and to have saved an estimated 5 million people from this incurable disease over the past 2 decades,

This author would like to request the source of the rationale for where this “5 million people” number has been invented from.

Actually, smallpox has never been eradicated. As sanitation increased in the mid-1800's nearly every contagious disease (plague, cholera, dysentery, measles, scarlet fever, whooping cough, etc) declined in number and severity. This included smallpox, until vaccination programs were enforced.

“One of the conclusions in Thomas McKeown's seminal work, The Modern Rise of Populations (1976, also endorsed by a Lancet editorial, 2/1/75), was that the decline in mortality in the 18th and 19th centuries was essentially due to the reduction in deaths from infectious diseases, and that it was not the result of immunizations. Similar studies by scholars John and Sonia McKinlay (1977) shows that almost all the increase in human lifespan since the year 1900 is due to reductions in infectious disease, with medical intervention (of all kinds) accounting for only about 3 percent of that reduction. According to World Health Statistics Annual, 1973-76, Vol.2, "there has been a steady decline of infectious diseases in most developing countries regardless of the percentage of immunizations administered in these countries.""

In fact, the incidence of smallpox actually increased once vaccination programs were instituted. In Jenner's time, there were only a few hundred cases of smallpox in England. After more than fifteen years of mandatory vaccinations, in 1870 and 1871 alone more than 23,000 people died from the disease. Later, in Japan, nearly 29,000 people died in just seven years under a stringent compulsory vaccination and re-vaccination program.

This increase in smallpox deaths was associated with a noticeable lack of protection, not the best combination of events. For example, in Germany, over 124,000 people died of smallpox during the same epidemic. All had been vaccinated. Additionally, (unaltered) hospital records consistently show that about 90 percent of all smallpox cases occurred after the individual was vaccinated. The vaccine decreased their natural protection and gave the patient the
disease. That’s a combination for death.

1665 London Bubonic plague, 68,000 died. People who avoided sugar survived. We know that sugar depresses the body’s natural defences. In 1668 the Merck family began an apothecary in Darmstadt, Germany. Then in 1673 inoculation against smallpox appears in Denmark. In 1712 we see the first record of inoculation of smallpox in France. In 1717 smallpox inoculation begins in England. In 1721 Boston, Cotton Mather inoculates smallpox pus into scratches of 220 healthy people providing only 6 of these people without any further smallpox reaction, he was publicly ostracized. Smallpox inoculation began in 1723 in Ireland, killing 3 people out of 25. This custom was halted briefly. In 1724 in Germany inoculation begins. In 1754 it is introduced in Rome and stopped due to smallpox deaths. From this, a critical mass is born, leading to smallpox epidemics killing hundreds of thousands of people. 8 million died from smallpox inoculation spread. The inoculation is what created the disease.

In Birmingham, England from 1871 to 1874 there were 7,706 smallpox cases, out of these 6,795 had been vaccinated.

To this day smallpox vaccines are handed out to the poor and unsuspecting who live in developing countries that suffer from similar sanitation issues.

Polio still exists, the name was changed to many other disease categories to give the illusion that vaccines had eradicated it. In 1956 the AMA (The American Medical Association) instructed each licensed medical doctor that they could no longer classify polio as thus, or else their license to practice would be terminated. Any paralysis was now to be diagnosed as AFP (acute flaccid paralysis) MS, MD, Bell's Palsy, cerebral palsy, ALS (Lou Gehrig's Disease), Guillain-Barre, meningitis, etc. This was orchestrated purposely to make the public believe polio was eradicated by the polio vaccine campaign. Because the polio vaccine contained toxic ingredients directly linked to paralysis, polio cases (not identified as polio) were skyrocketing, but only in vaccinated areas.

Archived Chicago Tribune article from 1960: “The Truth About the Polio Vaccines”:

“In the 50s, prior to the introduction of the polio vaccine, the majority of reported paralytic polio cases were documented as polio – even if they weren’t confirmed. This means that cases of aseptic (so-called viral) meningitis or other enterovirus infections (typically coxsackie or echo viruses, which are really protein diseases) that can cause transverse myelitis, were documented as polio. Cases of Guillain-Barre Syndrome (GBS), which is a known adverse reaction that occurs following vaccination (Pentacel insert, page 7) may have also been improperly reported as polio, since they have similar symptoms (demyelination). It’s even been discovered that Franklin D Roosevelt likely had GBS or pesticide poisoning, not polio.”

After the introduction of the polio vaccine, they began to test for and confirm suspected or reported cases of polio, thereby distinguishing between cases of polio and the other “polio-like” illnesses. By simply redefining the diagnostic criteria for what would be reported as “polio”, and no longer mislabelling polio-like illnesses as “polio”, this created an artificial drop in polio cases. The documentary “Vaccination: The Hidden Truth” (19:15-20:05) explains how this phenomenon also occurred in South America, showing that after the introduction of the polio vaccine, the reported or “notified” cases of polio actually increased, while the “confirmed” cases declined.

Pesticide poisoning can also lead to symptoms that resemble polio-like symptoms. President Roosevelt was exposed to DDT from his apple orchards and was paralyzed overnight. He also swam the day prior in a bay that was heavily polluted by industrial agricultural run off.

“The following statement appeared in the Handbook of Pesticide Toxicology, 1991, edited by Wayland J. Hayes and Edward R. Laws: “It has been alleged that DDT causes or contributes to a wide variety of diseases of humans and animals not previously recognized as associated with any chemical. Such diseases included. . . poliomyelitis, . . . such irresponsible claims could produce
great harm and, if taken seriously, even interfere with scientific search for true causes. . .”

Hayes and Laws were informing their readers about the heretic, Dr. Morton S. Biskind. In 1953, when Biskind’s writings were published, the United States had just endured its greatest polio epidemic. The entire public was steeped in dramatic images—a predatory poliovirus, nearly a million dead and paralyzed children, iron lungs, struggling doctors and dedicated nurses. The late president Franklin D. Roosevelt had been memorialized as a polio victim who was infected with the deadly poliovirus near the beautiful and remote island of Campobello. The media was saturated with positive images of scientific progress and the marvels of DDT to kill disease-carrying mosquitoes. Jonas Salk was in the wings, preparing to be moved center stage.

Through this intellectually paralyzing atmosphere, Dr. Biskind had the composure to argue what he thought was the most obvious explanation for the polio epidemic: **Central nervous system diseases (CNS) such as polio are actually the physiological and symptomatic manifestations of the ongoing government- and industry-sponsored inundation of the world’s populace with central nervous system poisons.**

A fact, based on accurate charting, clearly shows that the lowering of DDT levels in adipose tissue paralleled the hyped advent of the Salk vaccination programs. The polio vaccine was falsely hailed for reducing polio levels when it did no such thing.

Whereas vaccines have dramatically reduced the spread of many more crippling and potentially life-threatening diseases such as diphtheria, tetanus, measles, mumps, and rubella, and vaccines prevent the spread of commonly infectious and potentially fatal diseases such as chickenpox, shingles, influenza, hepatitis A, hepatitis B, meningococcal disease, pneumococcal, rotavirus, and whooping cough (pertussis);

“The specific disease doctrine is the grand refuge of weak, uncultured, unstable minds, such as now rule in the medical profession. There are no specific diseases; there are specific disease conditions.” – Florence Nightingale

Sadly, it is quite the opposite. Vaccines spread disease and cause infection by their very nature. They bypass the natural defence processes that start at the skin or nasal passages, the tonsils, saliva, limbic system and the gut. They overwhelm bodily defences, creating too many white blood cells, making sludgy, thick blood and giving micro strokes in the brain. This was scientifically proven again and again by Dr. Andrew Moulden MD.

Vaccines have created an autism epidemic in the United States that is beyond alarming. Please read the 29 studies posted in addendum 1 of this document that prove this is the case, merely 29 of hundreds that now exist proving this as fact. There are also thousands of testimonials of a parent taking their child to the pediatrician, getting a vaccine and that child immediately regresses into autism. The cause and effect is very obvious to anyone who has their senses about them. So then one must wonder, do the authors of HB327 have their senses about them? How could someone sensible get it so very wrong? Could this then, be an attempt at deception for nefarious reasons? I will let you be the judge of that.

Sanitation, quarantine and nutrition prevent disease. The onset of plumbing and hand washing as basic practice, the understanding of the need of fresh air, sunlight, clean water and food (see the wise nurse, Florence Nightengale's excellent testimonies on this topic) for disease prevention and rapid recovery from disease has has been researched so well, and is presented by so many researchers, to be an outright embarrassment to those who continue to choose to ignore these nail in the coffin facts.

Homeopathy is a simple cure for disease outbreaks as Dr. Hanhemann proved decades before Koch and Pasteur, he understood the principles of contagious illnesses, which are essentially poisoning via toxicity which causes the bodily
cells to break down. When tissue is dead and damaged, the tissues are acidic and this creates susceptibility to disease, born of one's own bacterial colonies that pleomorphically emerge off of the red blood cell membrane, called somatids/microzyma. Dr. S. Hanhemann successfully treated patients via the main water source, preventing deadly epidemics locally which ravaged Europe in the first half of the nineteenth century.

Accurate charting, not manipulated by industry to sell a faulty product, proved that indoor plumbing radically changed disease rates along with cleaning the body and hands, starting from Dr. Semmelweis then to Lister and then finally into popular culture by the late 1800s. The vaccine manufacturers fudged the data of declining diseases to suit their own needs, as we have caught them doing, time and time again, to promote the Rockefeller backed medical monopoly upon humanity.

Have people become so ignorant and careless, selfish and foolish to continue to fabricate historic data and manipulate current truth for the sake of big business interests and eugenicist based ideals? To force families to accept medical dogma as fact that has such a shaky track record, while ignoring the increases in disease rates is pure madness. If vaccines ever worked, the people should be in marvellous health. Sadly this is not the case. To deny the plethora of thousands of alternative, natural and effective preventative and holistic healing methods, to remove the rights of citizens to make their own health care decisions, to bully and coerce parents to vaccinate against their will and wishes, to deny that vaccines cause serious injury, and then to deliberately erase data which proves vaccines are harmful, are crimes that should be punishable by law. HR327 is nothing more than a horribly written, attempted cover up.

Any disease can be fatal, but the one's mentioned above are non-life threatening. Most often the individuals who die from these or any disease have weakened nutrition and defences; vaccines being the cause of both nutritional deficiency and damaged defences. The staggering rates of cancer, MS, fibromyalgia, chronic Lyme, mental disorders, stroke and heart attack, all primarily man-made diseases, have vaccines to blame. It is a travesty upon our earth and what is most alarming, witnessing a government which is either idiotic or corrupt.

Naturopathic Doctor Rosanne Lindsay writes,

“Outbreaks continue. The largest measles outbreaks all occur in highly vaccinated populations, and with more serious complications than with natural measles infection. Ironically, the suppression of the immune system by vaccines is revealing the truth about the virus: The “measles virus” is made up of structures from normal cells, which explains why vaccination against measles causes frequent and more severe allergies and autoimmune reactions. We are attacking our own cells.”

It also treats all individuals as if they are the same in this one-size-fits-all vaccine schedule. Some genetic predispositions are more vulnerable than others, an individual's health background and previous heavy metal exposures, their nutritional status, etc., are all nuances that can present varied risk factors. How does HR327, which will most likely lead to forced vaccinations, take the specificity of individuality into concern? News flash, it doesn’t.

Whereas the scientific and medical communities are in overwhelming consensus that vaccines are both effective and safe, and the dissemination of unfounded, and debunked, theories about the dangers of vaccinations pose a great risk to public health, and scientifically sound education and outreach campaigns about vaccination and immunization are fundamental for a well-informed public;

The only threat regarding so-called “debunked theories” about the dangers of vaccines is to the drug manufacturers bottom line. Safety studies on vaccines are not done in with true blind placebos over the long-term. NO safety testing has been done on combined vaccines, multi-dose vaccines, or even on the effect of multiple boosters. NO safety studies have been done on the ingredients in the vaccines, which are known neurotoxins and carcinogens.
If vaccines are so safe then why has the vaccine court paid out settlements totalling more than 3.3 BILLION DOLLARS and in 2013 a total of 24579 vaccines injuries were reported to VAERS? How outrageous a statement to blatantly ignore facts and then suggest education in the same sentence!

The real threat going on is that of the health of humanity and the individuals right to choose whether or not they want to take the risk of a medical procedure that could maim or kill them.

And while we are on the topical of education,

“Before 1960, there were only a few vaccines that were administered for rampant diseases that were known to have posed a clear and present danger, an immediate and imminent epidemiological threat. Today, it seems that the public health establishment is obsessed with developing vaccines against every conceivable microorganism, and these government programs are bent to include everyone, every child, every infant in the immunization loop. And yet, at this time, the medical evidence should tilt the balance of the debate towards the government allowing parents and individuals to be armed with reliable vaccine information. So empowered, as individuals and masters of their own destiny, citizens and parents should be allowed to make their own decisions or those of their children with their private physicians.”

What was meant by the statement above was that the public should be educated on FACT based information, not agenda, not propaganda and certainly not massaged information, for example the shredding party the CDC had in their attempt to bury the 3.4 fold increase in the incidence of autism in African American boys found from their MMR study. Dr. William Thompson came out as a CDC whistle-blower to shed light on this, one of many, frauds perpetrated and admitted by the CDC.

Perhaps their own indoctrinated scientific and medical community have consensus but yet again, this statement conveniently omits the rest of those not inside the consensus bubble. The Physicians for Informed Consent aren't in the consensus, that is for sure. This author and many other M.D.’s aren’t as well. For example, Dr. Russell Blaylock, Dr. Jay Gordon, Dr. Suzanne Humphries, Dr. Tenpenny, D.O., Dr. Andrew Wakefield, Dr. Lawrence Palevsky, Dr. Glen Dettman, Dr. Archie Kalokerinos, M.D., John B.Classen, M.D., M.B.A., Guylaine Lanctot M.D., Dr. Shiv Chopra, Dr. Nancy Banks and the list goes on.

From the very beginning of vaccines, since the first protests of the Anti-Vaccination League of America, there has been no consensus.

We are medically trained and scientifically trained as well. The statement is selective only to a group of believers, akin to a cult talking about their own congregation and choosing to ignore all other statements, experience, knowledge and unbiased science that shows the exact opposite of the belief system. Never mind the millions of parents that are being bullied and fear mongered into taking their injections and experiencing their children seizing, regressing, dying from SIDS or shaken baby syndrome, the high pitch screaming for days, the speech delays, the cancers, the infections and the deaths are all being swept under the rug, and that must be a big rug, since politicians clearly cannot research anything other than their own cherry picked data.

IOM only used epidemiological evidence to disregard the causal relationship between the MMR vaccine and autism in their 2004 Safety Review Committee Report. Many will be now familiar with Brian Hooker's and Dr. Thompson's testimonies of the CDC shredding evidence proving the MMR caused greater rates of autism in African-American boys. We also have a formal apology from the CDC, admitting they did this. They were caught here, we know this is common practice for these agencies in the pockets of the pharmaceutical corporations.

Burying data seems to be common place for this industry. For example, the Vaccine Safety Commission presented 50 studies that the AAP avoided to mention ongoing between 1995 and 2017.
Whereas an estimated 43,000 adults and 300 children die annually from vaccine-preventable diseases or their complications in the United States, and the health and livelihood of young children, seniors, individuals with immunodeficiency disorders, and those who cannot be vaccinated, is particularly compromised by communities with low vaccination rates;

In fact vaccines CAUSE immunodeficiency and auto-immune disorders, as science has proven, while the deaths from cancers, MS, heart disease and iatrogenic (doctor caused) medicine topple those numbers, never mind the morbidity caused by vaccines that these doctors conveniently ignore.

Injection of vaccine via this unnatural route can use up 70% of the immune system’s resources, instead of the usual 3 to 4% with a wild occurring disease (according to Cynthia Cournoyer, "What About Immunizations?", Dennis Nelson Publishers, 1991).

Because the body has no extra antibodies waiting to counter the vaccine, it can go into overdrive in an attempt to deal with the situation, taking much needed vitamins away from bones and other organs, to use for the production of more antibodies. This means that the other vital systems go short on vitamins, in extreme cases leading to bone fractures caused by the immune response leaching vitamins to cope with the vaccine. This lack of vitamins can also cause bruising and retinal bleeding and haemorrhaging, which is why some vaccine damaged babies have been falsely labelled as ‘shaken baby syndrome’ cases. These type of vaccine injuries are similar to those caused by trauma.

The massive surge of antibodies created by the vaccine can also cause the body to become hypersensitive and this is responsible for the increase in allergies and auto-immune diseases. Allergies are an over-exposure to toxic elements which the body is unable to cleanse itself of.

If the adrenals, which include the pancreas, the pituitary gland and the spleen, become over-stimulated, for instance, by vaccination, this can cause the body to become toxic and unable to regulate itself. This has been linked to heart disease, diabetes, asthma and bronchitis, to name a few. Over-stimulating the adrenals also causes a decrease in circulation of blood round the body, and atrophying of vascular vessels.

It is in this state of dysfunction and chemical overload, from vaccines, pollution, junk food, pharmaceutical drugs and so on, that our bodies become less able to stay healthy.

‘When the body is in its ideal state of harmony, there is no need for "immunity." In such a state of harmony and balance, the thymus functions properly as the central regulator for the proper digestion of elements and all that is taken into the body is digested and excreted.’ – (Stonebridge Associated Colleges, 2005).

Vaccine failures are all pervasive. Most communities that become ill have vaccination rates of 90% or higher. It is amazing how confident this statement is, a very bold assertion that vaccines prevent disease, however this is not what the independently funded, non-biased research shows.

Here are just a few of the many vaccine failures.

“Detection of RNA of Mumps Virus during an Outbreak in a Population with a High Level of Measles, Mumps, and Rubella Vaccine Coverage.”

“Measles outbreak in a vaccinated school population: epidemiology, chains of transmission and the role of vaccine failures.”

“Major measles epidemic in the region of Quebec despite a 99% vaccine coverage.”

“Pertussis epidemic despite high levels of vaccination coverage with acellular pertussis vaccine.”

VAERS lists complications and only a fraction of people are able to even get their complaint on VAERS as their MDs continually gaslight their patients telling them they must be wrong, there cannot possibly be a vaccine injury, with frustrated parents having to care for their vaccine damaged child alone and without acknowledgement or compensation.

This statement is also assuming a false idea of herd immunity. The herd immunity theory was originally coined in 1933 by a researcher called Hedrich. He had been studying measles patterns in the US between 1900-1931 (years before any vaccine was ever invented for measles) and he observed that epidemics of the illness only occurred when less than 68%
of children had developed a natural immunity to it. This was based upon the principle that children build their own immunity after suffering with or being exposed to the disease. So the herd immunity theory was, in fact, about natural disease processes and nothing to do with vaccination. If 68% of the population were allowed to build their own natural defences, there would be no raging epidemic. Later on, vaccinologists adopted the phrase and increased the figure from 68% to 95% with no scientific justification as to why, and then stated that there had to be 95% vaccine coverage to achieve immunity. Essentially, they took Hedrich’s study and manipulated it to promote their vaccination programs.

Whereas substantial research has shown that vaccination is a highly cost-effective form of preventive medicine, and the Centers for Disease Control and Prevention (CDC) estimates that vaccinations will save nearly $295 billion in direct costs and $1.38 trillion in total societal costs in the United States;

Those are some pretty hefty numbers without any justification of where they were derived from.

In fact, the vaccine racket is the most costly health care program to date. The disease, death and debility caused is so exponential to be incalculable. As a holistic practitioner taking a detailed health history, in 9 out of 10 cases, their disease begins with a vaccine.

Let’s look at some numbers that are actually backed with proper evidence. The following period covers fiscal years (FY) 1989 to FY 2013:

As of 2012, the U.S. Court of Federal Claims (aka the vaccine court) paid out $2,569,336,538.59 for compensating claims and $104,202,681.85 for attorneys’ fees representing those claims. The court paid another round of attorneys’ fees for dismissed claims totalling $56,375,431.34, plus $15,190,454.29 for interim attorneys’ fees.

The numbers to date (2018) show that 38 billion dollars have been paid out by The National Vaccine Injury Compensation Program (NVICP) or “vaccine court”. This is based on Health and Human Services (HHS) and the Vaccine Adverse Events Reporting System (VAERS) claims which estimate only 1% of adverse vaccine events are reported. This amount does not cover the cost of the program itself, nor for the HHS and DOJ employees who defend the vaccine products.

Whereas vaccines in the United States undergo exhaustive safety testing before they are licensed by the Food and Drug Administration (FDA) and are monitored for adverse events after health care providers begin administering them to patients;

No vaccine has ever been tested in pregnant women yet the ineffective flu shot containing mercury is given to pregnant women like it is fool proof. Mercury is well known to damage a fetus by the CDCs own statements.

Actually, no long-term study of vaccine effects on overall health has ever been conducted. Until recently there were no studies done comparing vaccinated to unvaccinated populations. The studies that have been done all prove that the unvaccinated are much healthier.

There are no studies done on multiple injections done at once, as it recommended to 'catch up' a child. Up to 8 injections are recommended in varying injection sites for a child 18 months or older.

The IOM (Institute of Medicine) now called the National Academy of Medicine, has repeatedly been shocked at the lack of scientific evidence of safety. In 1991, 1994, 1997, 2001, 2002 and in 2008, Dr. Louis Cooper wrote that the total vaccine safety budget was only 0.5% of the 4 billion total vaccine budget for purchase, promotion and delivery of vaccines. So it has found insufficient scientific knowledge and lack of safety studies, yet the program continues and only grows.

Then there are amount of vaccine recalls. Baxster's Flu Vaccine was recalled in 2009 and 2011. Contamination of
vaccines is a continual problem. The vero cell line has been shown to cause cancer due to their neoplasticity. The chicken embryo medium used to grow the flu vaccine can lead to Guillan-Barre caused from the \textit{C.jejuni} found in this medium.\textsuperscript{41} Vaccine scientist Dr. Judy Mikovits found mycotoxin and retroviral contamination in vaccines. Then we find out China is manufacturing most of the vaccines and their facilities are not allowed to be entered at will by the American government for inspection of process? What is going on here?

American children are sick – allergic, asthmatic, anxious, autoimmune, autistic, hyperactive, distracted and learning disabled. Thirty-two million American children – a full 43\% of them – suffer from at least one of 20 chronic illnesses not including obesity. Across the board, once rare pediatric disorders from autism and ADD to Type 1 diabetes and Tourette’s syndrome are soaring, though few studies pool the data. Compared to their parents, children today are four times more likely to have a chronic illness. And while their grandparents might never have swallowed a pill as children, the current generation of kids is a pharmaceutical sales rep’s dream come true: More than one million American children under five years old takes a psychiatric drug. More than 8.3 million kids under 17 have consumed psychiatric drugs, and in any given month one in four is taking at least one prescription drug for something.

How much do you think THAT costs?

Here is a study showing just how sick vaccinated children are. A pilot study of 666 homeschooled six to 12-year-olds from four American states published on April 27th in the Journal of Translational Sciences, compared 261 unvaccinated children with 405 partially or fully vaccinated children, and assessed their overall health based on their mothers' reports of vaccinations and physician-diagnosed illnesses. What it found about increases in immune-mediated diseases like allergies and neurodevelopmental diseases including autism, should make all parents think twice before they ever vaccinate again:

* Vaccinated children were over four-fold more likely to be diagnosed on the Autism Spectrum (OR 4.3)
* Vaccinated children were 30-fold more likely to be diagnosed with allergic rhinitis (hay fever) than non-vaccinated children
* Vaccinated children were 22-fold more likely to require an allergy medication than unvaccinated children
* Vaccinated children were over five-fold more likely to be diagnosed with a learning disability than unvaccinated children (OR 5.2)
* Vaccinated children were 340 percent more likely to be diagnosed with Attention Deficit Hyperactivity Disorder than unvaccinated children (OR 4.3)
* Vaccinated children were 5.9-fold more likely to have been diagnosed with pneumonia than unvaccinated children
* Vaccinated children were 3.8-fold more likely to be diagnosed with middle ear infection (otitis media) than unvaccinated children (OR 3.8)
* Vaccinated children were 700 percent more likely to have had surgery to insert ear drainage tubes than unvaccinated children (OR 8.1)
* Vaccinated children were 2.4-fold more likely to have been diagnosed with any chronic illness than unvaccinated children

Please don’t tell me to have vaccinated children who drool all day, hit themselves, are paralyzed, can’t wipe themselves, need around the clock care, can never earn a living, are less costly. The very notion is absurd.
Whereas there are three post-marketing surveillance systems in the United States tracking adverse events after vaccination;

As I have mentioned, only about 1% of vaccine reported events are reported, as M.D.s refuse to acknowledge the connection between vaccines and their many debilitating causes. I hear this story all the time, “She had her vaccines and then I took her home and she wouldn’t wake up, then when she did, she started high-pitched screaming and wouldn’t stop, so I took her to the hospital and they ran some tests. They didn’t know what it was. They gave her Tylenol and sent us home. The next day she would no longer make eye contact with us. When we returned to the doctor he diagnosed her as autistic and said the cause is “unknown”. We knew it was the vaccines but the doctor wouldn’t believe it.” When there are an entire population of medical doctors refuse to use their own critical thinking skills and fail to report to adverse events systems, then we have a statistical problem.

Whereas it is estimated that vaccinations will prevent more than 21 million hospitalizations and 732,000 deaths among children born in the last 20 years, and that more than 100 million children all over the world are immunized each year and vaccines have saved an estimated 2.5 million children annually;

If you take away the body's natural expression of disease and damage the immune system so that it no longer looks like the same disease, it's very easy to mislead people with this sort of statement because you can then manipulate studies to look like it's true, when its not. Just like what they did with polio to make it look like polio was eradicated. They will never admit the other diseases and illnesses that vaccines cause to increase hospitalization rates of course nor the huge expense of the autism epidemic.

Here is a study showing zero change in hospitalization for chicken pox. The vaccine has not affected hospital rates at all. “In contrast to predictions of prelicensure mathematical models, there has not been a significant decrease in total or first diagnosis VRHD since the vaccine became available. Current coverage levels are below those used in prelicensure models. Increased acceptance of the varicella vaccine by parents and practitioners may aid in the further decrease of varicella-related hospitalizations.” https://www.ncbi.nlm.nih.gov/pubmed/12394814

Like a broken record, the answer then becomes, “Well if it’s not working, then more vaccination must be needed”. It is the definition of clinical insanity. There is no thinking beyond it, even though the vaccine is NOT showing reduced hospitalizations, which is probably caused by other drug usage, like aspirin which can complicate chickenpox. Chickenpox is generally not life-threatening and getting it is actually is linked to a 21% reduction in glioma formation later in life.42

Here is a study called, “Relative trends in hospitalizations and mortality among infants by the number of vaccine doses and age, based on the Vaccine Adverse Event Reporting System (VAERS), 1990–2010”43 It says, “Our findings show a positive correlation between the number of vaccine doses administered and the percentage of hospitalizations and deaths. Finding ways to increase vaccine safety should be the highest priority.” So if vaccines are so safe, why is this study showing increases of hospitalization post vaccine calling for vaccines that are safe?

Whereas one in five children worldwide still lack access to even the most basic vaccines and, as a result, an estimated 1.5 million children a year die from vaccine-preventable conditions such as diarrhea and pneumonia or suffer from permanently debilitating illnesses;

I think it best to rewrite this statement for correction:

Whereas one in five children worldwide still lack access to even the most basic necessities like running, clean water, food and shelter and, as a result, FAR MORE THAN 1.5 million children a year die from nutrition and sanitation preventable conditions such as diarrhea and pneumonia or suffer from permanently debilitating illnesses;

My suggestion, take the money used to create vaccines an instead assist those to have proper shelter, food, water and
sanitation and all disease problems will be solved. Yes, yes, of course, we know...that is not the agenda what-so-ever. In that case it would be nice to stop pretending to care about people’s health.

There are many stories from parents here about how vaccines nearly killed their child, created debilitating illness in them and the doctors simply dismissed the facts: http://thinktwice.com/multiple.htm

Whereas a strong investment in medical research to improve existing vaccines and develop many more life-saving vaccines is beneficial to all, both at home and abroad, and a robust immunization infrastructure is essential to the public health and well-being of the people of the United States by preventing and isolating outbreaks of contagious diseases where they start;

As I have already shown, most outbreaks happen in fully vaccinated populations. Vaccine failures are rampant. We expect your answer to be more vaccines, which means: more money and more control. A sicker population is much more easy to manipulate. If your real desire is to prevent outbreaks of disease, then you would halt the vaccination program immediately.

Here are a number of other studies of disease occurring in the vaccinated:


~Diphtheria Outbreak -- Russian Federation, 1990-1993 Despite high levels of vaccination coverage against diphtheria, an ongoing outbreak of diphtheria has affected parts of the Russian Federation since 1990 (1); as of August 31, 1993, 12,865 cases had been reported. This report summarizes epidemiologic information about this outbreak for January 1990-August 1993, and is based on reports from public health officials in the Russian Federation.

~Shimoni, Zvi; Dobrousin, Anatoly; Cohen, Jonathan; et al. "Tetanus in an Immunised Patient" British Medical Journal Online (10/16/99) Vol. 319, No. 7216, P. 1049; Rev. Soc. Bras. Med. Trop., vol. 28, no. 4, Oct-Dec 1995, pp. 339-43 "Clinical and epidemiological findings during a measles outbreak occurring in a population with a high vaccination coverage" : "The history of previous vaccination [in very early childhood] did not diminish the number of complications of the cases studied. The results of this work show changes in age distribution of measles leading to sizeable outbreaks among teenagers and young adults."

~Clin. Invest. Med., vol. 11, no. 4, August 1988, pp. 304-9: "Measles serodiagnosis during an outbreak in a vaccinated community" (from a group of 30 measles-sufferers displaying IgM antibodies during the acute phase of illness, 17 had been vaccinated for measles. All 17 experienced measles again, showing IgM antibodies indicating acute infection. "A history of prior vaccination is not always associated with immunity nor with the presence of specific antibodies."


Your vaccines don’t work.

Whereas encouraging high vaccination rates in the United States protects our citizens from contracting vaccine-preventable diseases that are pandemic in countries with low vaccination and immunization rates;

Again, no. Vaccines do not prevent disease. They fail, despite high coverage. Vaccines prevent nothing at all. In fact vaccines are the medium of disease transmission. As I have already mentioned, diseases are pandemics in areas due to poor nutrition and lack of basic necessities of life. Many vaccines cause cancer because the immune system is not
being allowed to have it's regular milestones to train it and learn, and we know that cancers flourish due to immune system dysfunction, which we know vaccines cause. In fact vaccines contain nagalase which shuts down GeMAF protein in the body which prevents cancer.\textsuperscript{48} Mycoplama fungus found in vaccines also lead to cancer which Judy Mikovits found.

The polio virus was contaminated with SV-40 from 1955 to 1961 (again where were the safety tests on these?) which causes cancer: SV40 is present in human ependymomas, choroid plexus tumors, bone tumors, and mesotheliomas.\textsuperscript{45} It only took 50 years but the CDC finally admitted to the SV40 tainted polio vaccines.\textsuperscript{46} So glad they are so honest and caring for the people. They really sound so responsible. I am sure we should just blindly trust their word.

Another lie from the CDC: "Polio vaccines being used today do not contain SV40. All of the current evidence indicates that polio vaccines have been free of SV40 since 1963." This claim by the CDC is false. SV40-contaminated oral polio vaccines were produced from early 1960s to about 1978 and were used throughout the world.

We also know the story of HIV tainted Hepatitis B vaccinations. In 1978–1981, the CDC conducted a hepatitis B vaccine experiment on homosexual men living in New York City, San Francisco and Los Angeles.\textsuperscript{47} HIV/AIDS was first detected among the participants in the CDC hepatitis B vaccine trial and quickly spread throughout the gay community in those cities. Before these CDC experiments there were no reported cases of HIV or AIDS in America. Again more evidence that vaccines CAUSE disease.

\textbf{Whereas routine and up-to-date immunization is the most effective method available to prevent the infection and transmission of potentially fatal diseases; and}

As we have already established, vaccines do not prevent infection. Vaccines cause infection. They lead to fatalities.

According to data compiled from the government's Vaccine Adverse Events Reporting System (VAERS), as many as 145,000 children or more have died throughout the past 20 years as a result of this multiple vaccine dose approach alone. Catching kids up on vaccines is killing them, and this is only partial reporting and only mentioning mortality and not morbidity like autism.

\textbf{Whereas the United States has been a leader in promoting vaccinations around the world through the United States Agency for International Development, the Centers for Disease Control and Prevention, Gavi, the Vaccine Alliance, the Global Polio Eradication Initiative, UNICEF, the World Health Organization, and a host of other multilateral and nongovernmental organizations:}

Yes, the United States is guilty of this crime of spreading death and disease via vaccines across the world. All these organizations and backed by eugenicists like Bill & Melinda Gates and a revolving door of industry policy control by the pharmaceutical monopolies. When they are all in bed together and have so much money to ghost write biased science however they want, how can we trust any of them?

HR327 is false on so many levels. It is not based on fact, truth, valid research, testimony or any type of reality. What this house resolution does highlight, however, is either the serious lack of intelligence of its writers or their fundamental and callous moral disengagement.

\begin{center}
\textbf{About the Author:} Amandha D Vollmer holds a Bachelor of Science in Biotechnology from the University of Lethbridge, she graduated from The Canadian College of Naturopathic Medicine in 2008 and has been researching vaccine theory for nearly 20 years. As a holistic practitioner she uses sound medical principles to help her clients heal from disease. She is a mompreneur & owner of Yummy Mummy Emporium & Apothecary in Ontario, Canada, a brick
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& mortar and online store showcasing more than 80 all natural products she lovingly makes herself and much more. You can find her at www.yummymummyapothecary.com

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Addendum 1

29 Studies Highlighting the Link Between Autism and Vaccines:

1. Hepatitis B Vaccination of Male Neonates and Autism
Annals of Epidemiology , Vol. 19, No. 9 ABSTRACTS (ACE), September 2009: 651-680, p. 659
CM Gallagher, MS Goodman, Graduate Program in Public Health, Stony Brook University Medical Center, Stony Brook, NY
PURPOSE: Universal newborn immunization with hepatitis B vaccine was recommended in 1991; however, safety findings are mixed. The Vaccine Safety Datalink Workgroup reported no association between hepatitis B vaccination at birth and febrile episodes or neurological adverse events. Other studies found positive associations between
hepatitis B vaccination and ear infection, pharyngitis, and chronic arthritis; as well as receipt of early intervention/special education services (EIS); in probability samples of U.S. children. Children with autistic spectrum disorder (ASD) comprise a growing caseload for EIS. We evaluated the association between hepatitis B vaccination of male neonates and parental report of ASD.

METHODS: This cross-sectional study used U.S. probability samples obtained from National Health Interview Survey 1997-2002 datasets. Logistic regression modeling was used to estimate the effect of neonatal hepatitis B vaccination on ASD risk among boys age 3-17 years with shot records, adjusted for race, maternal education, and two-parent household.

RESULTS: Boys who received the hepatitis B vaccine during the first month of life had 2.94 greater odds for ASD (n=31 of 7,486; OR Z 2.94; p Z 0.03; 95% CI Z 1.10, 7.90) compared to later- or unvaccinated boys. Non-Hispanic white boys were 61% less likely to have ASD (ORZ0.39; pZ0.04; 95% CIZ0.16, 0.94) relative to non-white boys.

CONCLUSION: Findings suggest that U.S. male neonates vaccinated with hepatitis B vaccine had a 3-fold greater risk of ASD; risk was greatest for non-white boys.


Robert Natafa, Corinne Skorupkab, Lorene Ametb, Alain Lama, Anthea Springbettc and Richard Latshed, aLaboratoire Philippe Auguste, Paris, France, Association ARIANE, Clichy, France, Department of Statistics, Roslin Institute, Roslin, UK, Pieta Research,

This new study from France utilizes a new and sophisticated measurement for environmental toxicity by assessing porphyrin levels in autistic children. It provides clear and unequivocal evidence that children with autism spectrum disorders are more toxic than their neurotypical peers.

Excerpt: "Coproporphyrin levels were elevated in children with autistic disorder relative to control groups...the elevation was significant. These data implicate environmental toxicity in childhood autistic disorder."

Abstract: To address a possible environmental contribution to autism, we carried out a retrospective study on urinary porphyrin levels, a biomarker of environmental toxicity, in 269 children with neurodevelopmental and related disorders referred to a Paris clinic (2002–2004), including 106 with autistic disorder. Urinary porphyrin levels determined by high-performance liquid chromatography were compared between diagnostic groups including internal and external control groups. Coproporphyrin levels were elevated in children with autistic disorder relative to control groups. Elevation was maintained on normalization for age or to a control heme pathway metabolite (uroporphyrin) in the same samples. The elevation was significant (P < 0.001). Porphyrin levels were unchanged in Asperger's disorder, distinguishing it from autistic disorder. The atypical molecule precoproporphyrin, a specific indicator of heavy metal toxicity, was also elevated in autistic disorder (P < 0.001) but not significantly in Asperger's. A subgroup with autistic disorder was treated with oral dimercaptosuccinic acid (DMSA) with a view to heavy metal removal. Following DMSA there was a significant (P = 0.002) drop in urinary porphyrin excretion. These data implicate environmental toxicity in childhood autistic disorder.


Autism, a member of the pervasive developmental disorders (PDDs), has been increasing dramatically since its description by Leo Kanner in 1943. First estimated to occur in 4 to 5 per 10,000 children, the incidence of autism is now 1 per 110 in the United States, and 1 per 64 in the United Kingdom, with similar incidences throughout the world. Searching information from 1943 to the present in PubMed and Ovid Medline databases, this review summarizes results that correlate the timing of changes in incidence with environmental changes. Autism could result from more than one cause, with different manifestations in different individuals that share common symptoms. Documented causes of autism include genetic mutations and/or deletions, viral infections, and encephalitis following vaccination. Therefore, autism is the result of genetic defects and/or inflammation of the brain. The inflammation could be caused
by a defective placenta, immature blood-brain barrier, the immune response of the mother to infection while pregnant, a premature birth, encephalitis in the child after birth, or a toxic environment.

4. Uncoupling of ATP-mediated Calcium Signaling and Dysregulated IL-6 Secretion in Dendritic Cells by Nanomolar Thimerosal

Environmental Health Perspectives, July 2006. Samuel R. Goth, Ruth A. Chu Jeffrey P. Gregg

This study demonstrates that very low-levels of Thimerosal can contribute to immune system disregulation.

Excerpt: "Our findings that DCs primarily express the RyR1 channel complex and that this complex is uncoupled by very low levels of THI with dysregulated IL-6 secretion raise intriguing questions about a molecular basis for immune dyregulation and the possible role of the RyR1 complex in genetic susceptibility of the immune system to mercury."

Abstract

Dendritic cells (DCs), a rare cell type widely distributed in the soma, are potent antigen presenting cells that initiate primary immune responses. DCs rely on intracellular redox state and calcium (Ca2+) signals for proper development and function, but the relationship between these two signaling systems is unclear. Thimerosal (THI) is a mercurial used to preserve vaccines, consumer products, and experimentally to induce Ca2+ release from microsomal stores. We tested ATP-mediated Ca2+ responses of DCs transiently exposed to nanomolar THI. Transcriptional and immunocytochemical analyses show murine myeloid immature and mature DC (IDCs, MDCs) express inositol 1, 4, 5-trisphosphate and ryanodine receptor (IP3R, RyR) Ca2+ channels, known targets of THI. IDCs express the RyR1 isoform in a punctate distribution that is densest near plasma membranes and within dendritic processes whereas IP3Rs are more generally distributed. RyR1 positively and negatively regulates purinergic signaling since ryanodine (Ry) blockade (1) recruited 80 percent more ATP responders, (2) shortened ATP-mediated Ca2+ transients >2-fold, (3) and produced a delayed and persistent rise (≥2-fold) in baseline Ca2+. THI (100nM, 5min) recruited more ATP responders, shortened the ATP-mediated Ca2+ transient (≥1.4-fold) and produced a delayed rise (≥3-fold) in the Ca2+ baseline, mimicking Ry. THI and Ry, in combination, produced additive effects leading to uncoupling of IP3R and RyR1 signals. THI altered ATP-mediated IL-6 secretion, initially enhancing the rate of but suppressing overall cytokine secretion in DCs. DCs are exquisitely sensitive to THI, with one mechanism involving the uncoupling of positive and negative regulation of Ca2+ signals contributed by RyR1.

5. Gender-selective toxicity of thimerosal.


Branch DR, Departments of Medicine and Laboratory Medicine and Pathobiology, University of Toronto, Ontario, Canada.

Abstract

A recent report shows a correlation of the historical use of thimerosal in therapeutic immunizations with the subsequent development of autism; however, this association remains controversial. Autism occurs approximately four times more frequently in males compared to females; thus, studies of thimerosal toxicity should take into consideration gender-selective effects. The present study was originally undertaken to determine the maximum tolerated dose (MTD) of thimerosal in male and female CD1 mice. However, during the limited MTD studies, it became apparent that thimerosal has a differential MTD that depends on whether the mouse is male or female. At doses of 38.4-76.8mg/kg using 10% DMSO as diluent, seven of seven male mice compared to zero of seven female mice tested succumbed to thimerosal. Although the thimerosal levels used were very high, as we were originally only trying to determine MTD, it was completely unexpected to observe a difference of the MTD between male and female mice. Thus, our studies, although not directly addressing the controversy surrounding thimerosal and autism, and still preliminary due to small numbers of mice examined, provide, nevertheless, the first report of gender-selective toxicity of thimerosal and indicate that any future studies of thimerosal toxicity should take into consideration gender-specific differences.

Thomas Burbacher, PhD [University of Washington].

This study demonstrates clearly and unequivocally that ethyl mercury, the kind of mercury found in vaccines, not only ends up in the brain, but leaves double the amount of inorganic mercury as methyl mercury, the kind of mercury found in fish. This work is groundbreaking because little is known about ethyl mercury, and many health authorities have asserted that the mercury found in vaccines is the "safe kind." This study also delivers a strong rebuke of the Institute of Medicine's recommendation in 2004 to no longer pursue the mercury-autism connection.

Excerpt: "A recently published IOM review (IOM 2004) appears to have abandoned the earlier recommendation [of studying mercury and autism] as well as back away from the American Academy of Pediatrics goal [of removing mercury from vaccines]. This approach is difficult to understand, given our current limited knowledge of the toxicokinetics and developmental neurotoxicity of thimerosal, a compound that has been (and will continue to be) injected in millions of newborns and infants."

7. Increases in the number of reactive glia in the visual cortex of Macaca fascicularis following subclinical long-term methyl mercury exposure. Toxicology and Applied Pharmacology, 1994

Charleston JS, Bolender RP, Mottet NK, Body RL, Vahter ME, Burbacher TM., Department of Pathology, School of Medicine, University of Washington

The number of neurons, astrocytes, reactive glia, oligodendrocytes, endothelia, and pericytes in the cortex of the calcarine sulcus of adult female Macaca fascicularis following long-term subclinical exposure to methyl mercury (MeHg) and mercuric chloride (inorganic mercury; IHg) has been estimated by use of the optical volume fractionator stereology technique. Four groups of monkeys were exposed to MeHg (50 micrograms Hg/kg body wt/day) by mouth for 6, 12, 18, and 12 months followed by 6 months without exposure (clearance group). A fifth group of monkeys was administered IHg (as HgCl2; 200 micrograms Hg/kg body wt/day) by constant rate intravenous infusion via an indwelling catheter for 3 months. Reactive glia showed a significant increase in number for every treatment group, increasing 72% in the 6-month, 152% in the 12-month, and 120% in the 18-month MeHg exposed groups, and the number of reactive glia in the clearance group remained elevated (89%). The IHg exposed group showed a 165% increase in the number of reactive glia. The IHg exposed group and the clearance group had low levels of MeHg present within the tissue; however, the level of IHg was elevated in both groups. These results suggest that the IHg may be responsible for the increase in reactive glia. All other cell types, including the neurons, showed no significant change in number at the prescribed exposure level and durations. The identities of the reactive glial cells and the implications for the long-term function and survivability of the neurons due to changes in the glial population following subclinical long-term exposure to mercury are discussed.

8. Neuroglial Activation and Neuroinflammation in the Brain of Patients with Autism

Annals of Neurology, Feb 2005. Diana L. Vargas, MD [Johns Hopkins University].

This study, performed independently and using a different methodology than Dr. Herbert (see above) reached the same conclusion: the brains of autistic children are suffering from inflammation.

Excerpt: "Because this neuroinflammatory process appears to be associated with an ongoing and chronic mechanism of CNS dysfunction, potential therapeutic interventions should focus on the control of its detrimental effects and thereby eventually modify the clinical course of autism."

9. Autism: A Brain Disorder, or A Disorder That Affects the Brain? Clinical Neuropsychiatry, 2005

Martha R. Herbert M.D., Ph.D., Harvard University

Autism is defined behaviorally, as a syndrome of abnormalities involving language, social reciprocity and hyperfocus or reduced behavioral flexibility. It is clearly heterogeneous, and it can be accompanied by unusual talents as well as by impairments, but its underlying biological and genetic basis in unknown. Autism has been modeled as a brain-based, strongly genetic disorder, but emerging findings and hypotheses support a broader model of the condition as a genetically influenced and systemic. These include imaging, neuropathology and psychological evidence of pervasive (and not just specific) brain and phenotypic features; postnatal evolution and chronic persistence of brain, behavior and tissue changes (e.g. inflammation) and physical illness symptomatology (e.g. gastrointestinal, immune, recurrent
infection); overlap with other disorders; and reports of rate increases and improvement or recovery that support a role for modulation of the condition by environmental factors (e.g. exacerbation or triggering by toxins, infectious agents, or others stressors, or improvement by treatment). Modeling autism more broadly encompasses previous work, but also encourages the expansion of research and treatment to include intermediary domains of molecular and cellular mechanisms, as well as chronic tissue, metabolic and somatic changes previously addressed only to a limited degree. The heterogeneous biologies underlying autism may conceivably converge onto the autism profile via multiple mechanisms on the one hand and processing and connectivity abnormalities on the other may illuminate relevant final common pathways and contribute to focusing on the search for treatment targets in this biologically and etiologically heterogeneous behavioral syndrome.

10. Activation of Methionine Synthase by Insulin-like Growth Factor-1 and Dopamine: a Target for Neurodevelopmental Toxins and Thimerosal, Molecular Psychiatry, July 2004.
Richard C. Deth, PhD [Northeastern University].
This study demonstrates how Thimerosal inhibits methylation, a central driver of cellular communication and development. Excerpt:
"The potent inhibition of this pathway [methylation] by ethanol, lead, mercury, aluminum, and thimerosal suggests it may be an important target of neurodevelopmental toxins."

11. Validation of the Phenomenon of Autistic Regression Using Home Videotapes, Archives of General Psychiatry, 2005, Emily Werner, PhD; Geraldine Dawson, PhD, University of Washington
Objective To validate parental report of autistic regression using behavioral data coded from home videotapes of children with autism spectrum disorder (ASD) vs typical development taken at 12 and 24 months of age.
Design Home videotapes of 56 children’s first and second birthday parties were collected from parents of young children with ASD with and without a reported history of regression and typically developing children. Child behaviors were coded by raters blind to child diagnosis and regression history. A parent interview that elicited information about parents’ recall of early symptoms from birth was also administered.
Setting Participants were recruited from a multidisciplinary study of autism conducted at a major university.
Participants Fifteen children with ASD with a history of regression, 21 children with ASD with early-onset autism, and 20 typically developing children and their parents participated.
Main Outcome Measures Observations of children’s communicative, social, affective, repetitive behaviors, and toy play coded from videotapes of the toddlers’ first and second birthday parties.
Results Analyses revealed that infants with ASD with regression show similar use of joint attention and more frequent use of words and babble compared with typical infants at 12 months of age. In contrast, infants with ASD with early onset of symptoms and no regression displayed fewer joint attention and communicative behaviors at 12 months of age. By 24 months of age, both groups of toddlers with ASD displayed fewer instances of word use, vocalizations, declarative pointing, social gaze, and orienting to name as compared with typically developing 24-month-olds.
Parent interview data suggested that some children with regression displayed difficulties in regulatory behavior before the regression occurred.
Conclusion This study validates the existence of early autistic regression.

Excerpt: “We have reanalyzed the data set originally reported by Ip et al. in 2004 and have found that the original p value was in error and that a significant relation does exist between the blood levels of mercury and diagnosis of an autism spectrum disorder. Moreover, the hair sample analysis results offer some support for the idea that persons with autism may be less efficient and more variable at eliminating mercury from the blood.”
Abstract

The question of what is leading to the apparent increase in autism is of great importance. Like the link between aspirin and heart attack, even a small effect can have major health implications. If there is any link between autism and mercury, it is absolutely crucial that the first reports of the question are not falsely stating that no link occurs. We have reanalyzed the data set originally reported by Ip et al. in 2004 and have found that the original p value was in error and that a significant relation does exist between the blood levels of mercury and diagnosis of an autism spectrum disorder. Moreover, the hair sample analysis results offer some support for the idea that persons with autism may be less efficient and more variable at eliminating mercury from the blood.


This article showed that 38% of Kennedy Krieger Institute autism patients studied had one marker for impaired oxidative phosphorylation (mitochondrial dysfunction), and 47% had a second marker.
Excerpt: "Children who have (mitochondrial-related) dysfunctional cellular energy metabolism might be more prone to undergo autistic regression between 18 and 30 months of age if they also have infections or immunizations at the same time."


Shows a potential link between mercury and the autopsied brains of young people with autism. A marker for oxidative stress was 68.9% higher in autistic brain issue than controls (a statistically significant result), while mercury levels were 68.2% higher.
Excerpt: The preliminary data suggest a need for more extensive studies of oxidative stress, its relationship to the environmental factors and its possible attenuation by antioxidants in autism.”


This study helps refute the notion that the brains of autistic children are simply wired differently and notes, "neuroinflammation appears to be present in autistic brain tissue from childhood through adulthood." Dr. Herbert suggests that chronic disease or an external environmental source (like heavy metals) may be causing the inflammation.
Excerpt: "Oxidative stress, brain inflammation, and microgliosis have been much documented in association with toxic exposures including various heavy metals...the awareness that the brain as well as medical conditions of children with autism may be conditioned by chronic biomedical abnormalities such as inflammation opens the possibility that meaningful biomedical interventions may be possible well past the window of maximal neuroplasticity in early childhood because the basis for assuming that all deficits can be attributed to fixed early developmental alterations in neural architecture has now been undermined."

Abstract

The most replicated finding in autism neuroanatomy—a tendency to unusually large brains—has seemed paradoxical in relation to the specificity of the abnormalities in three behavioral domains that define autism. We now know a range of things about this phenomenon, including that brains in autism have a growth spurt shortly after birth and then slow in growth a few short years afterward, that only younger but not older brains are larger in autism than in controls, that white matter contributes disproportionately to this volume increase and in a nonuniform pattern suggesting postnatal pathology, that functional connectivity among regions of autistic brains is diminished, and that neuroinflammation (including microgliosis and astrogliosis) appears to be present in autistic brain tissue from childhood through adulthood. Alongside these pervasive brain tissue and functional abnormalities, there have arisen theories of pervasive or widespread neural information processing or signal coordination abnormalities (such as weak central coherence, impaired complex processing, and underconnectivity), which are argued to underlie the specific observable behavioral
features of autism. This convergence of findings and models suggests that a systems- and chronic disease–based reformulation of function and pathophysiology in autism needs to be considered, and it opens the possibility for new treatment targets.

16. Evidence of Toxicity, Oxidative Stress, and Neuronal Insult in Autism
Janet Kern, Anne Jones, Department of Psychiatry, University of Texas Southwestern Medical Center at Dallas, Dallas, Texas, USA

"This article discusses the evidence for the case that some children with autism may become autistic from neuronal cell death or brain damage sometime after birth as result of insult; and addresses the hypotheses that toxicity and oxidative stress may be a cause of neuronal insult in autism... the article discusses what may be happening over the course of development and the multiple factors that may interplay and make these children more vulnerable to toxicity, oxidative stress, and neuronal insult."

Abstract
According to the Autism Society of America, autism is now considered to be an epidemic. The increase in the rate of autism revealed by epidemiological studies and government reports implicates the importance of external or environmental factors that may be changing. This article discusses the evidence for the case that some children with autism may become autistic from neuronal cell death or brain damage sometime after birth as result of insult; and addresses the hypotheses that toxicity and oxidative stress may be a cause of neuronal insult in autism. The article first describes the Purkinje cell loss found in autism, Purkinje cell physiology and vulnerability, and the evidence for postnatal cell loss. Second, the article describes the increased brain volume in autism and how it may be related to the Purkinje cell loss. Third, the evidence for toxicity and oxidative stress is covered and the possible involvement of glutathione is discussed. Finally, the article discusses what may be happening over the course of development and the multiple factors that may interplay and make these children more vulnerable to toxicity, oxidative stress, and neuronal insult.

17. Oxidative Stress in Autism, Pathophysiology, 2006. Abha Chauhan, Ved Chauhan

This study provides a helpful overview of the growing evidence supporting the link between oxidative stress and autism.

Excerpt: "Upon completion of this article, participants should be able to: 1. Be aware of laboratory and clinical evidence of greater oxidative stress in autism. 2. Understand how gut, brain, nutritional, and toxic status in autism are consistent with greater oxidative stress. 3. Describe how anti-oxidant nutrients are used in the contemporary treatment of autism."

18. Thimerosal Neurotoxicity is Associated with Glutathione Depletion: Protection with Glutathione Precursors
Neurotoxicology, Jan 2005. S. Jill James, PhD [University of Arkansas].

This recent study demonstrates that Thimerosal lowers or inhibits the body's ability to produce Glutathione, an antioxidant and the body's primary cellular-level defense against mercury.

Excerpt: "Thimerosal-induced cytotoxicity was associated with depletion of intracellular Glutathione in both cell lines...The potential effect of Glutathione or N-acetylcysteine against mercury toxicity warrants further research as possible adjunct therapy to individuals still receiving Thimerosal-containing vaccines."

19. Aluminum adjuvant linked to gulf war illness induces motor neuron death in mice
Neuromolecular Medicine, 2007
Christopher Shaw, Ph.D. [Department of Ophthalmology and Program in Neuroscience, University of British Columbia, Vancouver, British Columbia, Canada]

This study demonstrates the extreme toxicity of the aluminum adjuvant used as a preservative in vaccines.
Excerpt: "testing showed motor deficits in the aluminum treatment group that expressed as a progressive decrease in strength measured... Significant cognitive deficits in water-maze learning were observed in the combined aluminum and squalene group... Apoptotic neurons were identified in aluminum-injected animals that showed significantly increased activated caspase-3 labeling in lumbar spinal cord (255%) and primary motor cortex (192%) compared with the controls. Aluminum-treated groups also showed significant motor neuron loss (35%) and increased numbers of astrocytes (350%) in the lumbar spinal cord.

20. Environmental mercury release, special education rates, and autism disorder: an ecological study of Texas Health & Place, 2006
Raymond F. Palmer, University of Texas Health Science Center
This study demonstrated the correlation between environmental mercury and autism rates in Texas.
Excerpt: "On average, for each 1,000 lb of environmentally released mercury, there was a 43% increase in the rate of special education services and a 61% increase in the rate of autism. The association between environmentally released mercury and special education rates were fully mediated by increased autism rates. This ecological study suggests the need for further research regarding the association between environmentally released mercury and developmental disorders such as autism."

Gayle Windham, Div. of Environmental and Occupational Disease Control, California Department of Health Services
284 ASD children & 657 controls, born in 1994 in Bay Area, were assigned exposure levels by birth tract for 19 chemicals. Risks for autism were elevated by 50% in tracts with the highest chlorinated solvents and heavy metals. The highest risk compounds were mercury, cadmium, nickel, trichloroethylene, and vinyl chloride, and the risk from heavy metals was almost twice as high as solvents.
Excerpt: “Our results suggest a potential association between autism and estimated metal concentrations, and possibly solvents, in ambient air around the birth residence.”

22. A Case Series of Children with Apparent Mercury Toxic Encephalopathies Manifesting with Clinical Symptoms of Regressive Autistic Disorder
Journal of Toxicology and Environmental Health, 2007, David A. Geier, Mark R. Geier
This study reviewed the case histories and medical profiles of nine autistic children and concluded that eight of the nine children were mercury toxic and this toxicity manifested itself in a manner consistent with Autism Spectrum Disorders.
Excerpt: "...these previously normally developing children suffered mercury toxic encephalopathies that manifested with clinical symptoms consistent with regressive ASDs. Evidence for mercury intoxication should be considered in the differential diagnosis as contributing to some regressive ASDs."

Abstract
Impairments in social relatedness and communication, repetitive behaviors, and stereotypic abnormal movement patterns characterize autism spectrum disorders (ASDs). It is clear that while genetic factors are important to the pathogenesis of ASDs, mercury exposure can induce immune, sensory, neurological, motor, and behavioral dysfunctions similar to traits defining or associated with ASDs. The Institutional Review Board of the Institute for Chronic Illnesses (Office for Human Research Protections, U.S. Department of Health and Human Services, IRB number IRB00005375) approved the present study. A case series of nine patients who presented to the Genetic Centers of America for a genetic/developmental evaluation are discussed. Eight of nine patients (one patient was found to have an ASD due to Rett’s syndrome) (a) had regressive ASDs; (b) had elevated levels of androgens; (c) excreted significant amounts of mercury post chelation challenge; (d) had biochemical evidence of decreased function in their glutathione pathways; (e) had no known significant mercury exposure except from Thimerosal-containing vaccines/Rho(D)-
immune globulin preparations; and (f) had alternate causes for their regressive ASDs ruled out. There was a significant dose-response relationship between the severity of the regressive ASDs observed and the total mercury dose children received from Thimerosal-containing vaccines/Rho (D)- immune globulin preparations. Based upon differential diagnoses, 8 of 9 patients examined were exposed to significant mercury from Thimerosal-containing biologic/vaccine preparations during their fetal/infant developmental periods, and subsequently, between 12 and 24 mo of age, these previously normally developing children suffered mercury toxic encephalopathies that manifested with clinical symptoms consistent with regressive ASDs. Evidence for mercury intoxication should be considered in the differential diagnosis as contributing to some regressive ASDs.

Mark F. Blaxill, David S. Baskin, and Walter O. Spitzer

This study helps to refute the supposition made by some researchers that autism's epidemic may only be due to "diagnostic substitution".

Excerpt: "They have suggested that 'diagnostic substitution' accounts for an apparent increase in the incidence of autism in California that is not real. This hypothesized substitution is not supported by proper and detailed analyses of the California data."


Department of Physiology and Biophysics and Department of Pediatrics, Section of Human Genetics, School of Medicine, University of California, Irvine, Arabian Diagnostics Laboratory, King Faisal Specialist Hospital and Research Centre

Abstract
While evidence points to a multigenic etiology of most autism, the pathophysiology of the disorder has yet to be defined and the underlying genes and biochemical pathways they subserve remain unknown. Autism is considered to be influenced by a combination of various genetic, environmental and immunological factors; more recently, evidence has suggested that increased vulnerability to oxidative stress may be involved in the etiology of this multifactorial disorder. Furthermore, recent studies have pointed to a subset of autism associated with the biochemical endophenotype of mitochondrial energy deficiency, identified as a subtle impairment in fat and carbohydrate oxidation. This phenotype is similar, but more subtle than those seen in classic mitochondrial defects. In some cases the beginnings of the genetic underpinnings of these mitochondrial defects are emerging, such as mild mitochondrial dysfunction and secondary carnitine deficiency observed in the subset of autistic patients with an inverted duplication of chromosome 15q11-q13. In addition, rare cases of familial autism associated with sudden infant death syndrome (SIDS) or associated with abnormalities in cellular calcium homeostasis, such as malignant hyperthermia or cardiac arrhythmia, are beginning to emerge. Such special cases suggest that the pathophysiology of autism may comprise pathways that are directly or indirectly involved in mitochondrial energy production and to further probe this connection three new avenues seem worthy of exploration: 1) metabolomic clinical studies provoking controlled aerobic exercise stress to expand the biochemical phenotype, 2) high-throughput expression arrays to directly survey activity of the genes underlying these biochemical pathways and 3) model systems, either based upon neuronal stem cells or model genetic organisms, to discover novel genetic and environmental inputs into these pathways.

25. Bridging from Cells to Cognition in Autism Pathophysiology: Biological Pathways to Defective Brain Function and Plasticity
Matthew P. Anderson, Brian S. Hooker and Martha R. Herbert

Departments of Neurology and Pathology, Harvard Medical School/Beth Israel Deaconess Medical Center, Harvard Institutes of Medicine, High Throughput Biology Team, Fundamental Science Directorate, Pacific Northwest National Laboratory, Pediatric Neurology/Center for Morphometric Analysis, Massachusetts General Hospital/Harvard Medical School, and Center for Child and Adolescent Development, Cambridge Health Alliance/Harvard Medical School
Abstract: We review evidence to support a model where the disease process underlying autism may begin when an in utero or early postnatal environmental, infectious, seizure, or autoimmune insult triggers an immune response that increases reactive oxygen species (ROS) production in the brain that leads to DNA damage (nuclear and mitochondrial) and metabolic enzyme blockade and that these inflammatory and oxidative stressors persist beyond early development (with potential further exacerbations), producing ongoing functional consequences. In organs with a high metabolic demand such as the central nervous system, the continued use of mitochondria with damaged DNA and impaired metabolic enzyme function may generate additional ROS which will cause persistent activation of the innate immune system leading to more ROS production. Such a mechanism would self-sustain and possibly progressively worsen. The mitochondrial dysfunction and altered redox signal transduction pathways found in autism would conspire to activate both astroglia and microglia. These activated cells can then initiate a broad-spectrum proinflammatory gene response. Beyond the direct effects of ROS on neuronal function, receptors on neurons that bind the inflammatory mediators may serve to inhibit neuronal signaling to protect them from excitotoxic damage during various pathologic insults (e.g., infection). In autism, over-zealous neuroinflammatory responses could not only influence neural developmental processes, but may more significantly impair neural signaling involved in cognition in an ongoing fashion. This model makes specific predictions in patients and experimental animal models and suggests a number of targets sites of intervention. Our model of potentially reversible pathophysiological mechanisms in autism motivates our hope that effective therapies may soon appear on the horizon.

26. Heavy-Metal Toxicity—With Emphasis on Mercury
John Neustadt, ND, and Steve Pieczenik, MD, PhD
Research Review
Conclusion: Metals are ubiquitous in our environment, and exposure to them is inevitable. However, not all people accumulate toxic levels of metals or exhibit symptoms of metal toxicity, suggesting that genetics play a role in their potential to damage health. Metal toxicity creates multisystem dysfunction, which appears to be mediated primarily through mitochondrial damage from glutathione depletion.

Accurate screening can increase the likelihood that patients with potential metal toxicity are identified. The most accurate screening method for assessing chronic-metals exposure and metals load in the body is a provoked urine test.

27. Evidence of Mitochondrial Dysfunction in Autism and Implications for Treatment
Daniel A. Rossignol, J. Jeffrey Bradstreet, International Child Development Resource Center,
Abstract: Classical mitochondrial diseases occur in a subset of individuals with autism and are usually caused by genetic anomalies or mitochondrial respiratory pathway deficits. However, in many cases of autism, there is evidence of mitochondrial dysfunction (MtD) without the classic features associated with mitochondrial disease. MtD appears to be more common in autism and presents with less severe signs and symptoms. It is not associated with discernable mitochondrial pathology in muscle biopsy specimens despite objective evidence of lowered mitochondrial functioning. Exposure to environmental toxins is the likely etiology for MtD in autism. This dysfunction then contributes to a number of diagnostic symptoms and comorbidities observed in autism including: cognitive impairment, language deficits, abnormal energy metabolism, chronic gastrointestinal problems, abnormalities in fatty acid oxidation, and increased oxidative stress. MtD and oxidative stress may also explain the high male to female ratio found in autism due to increased male vulnerability to these dysfunctions.

Biomarkers for mitochondrial dysfunction have been identified, but seem widely under-utilized despite available therapeutic interventions. Nutritional supplementation to decrease oxidative stress along with factors to improve reduced glutathione, as well as hyperbaric oxygen therapy (HBOT) represent supported and rationale approaches. The underlying pathophysiology and autistic symptoms of affected individuals would be expected to either improve or cease worsening once effective treatment for MtD is implemented.

28. Proximity to point sources of environmental mercury release as a predictor of autism prevalence
Health & Place, 2008 Raymond F. Palmer, Stephen Blanchard, Robert Wood
This study should be viewed as hypothesis-generating - a first step in examining the potential role of environmental mercury and childhood developmental disorders. Nothing is known about specific exposure routes, dosage, timing, and individual susceptibility. We suspect that persistent low-dose exposures to various environmental toxicants, including mercury, that occur during critical windows of neural development among genetically susceptible children (with a diminished capacity for metabolizing accumulated toxicants) may increase the risk for developmental disorders such as autism. Successfully identifying the specific combination of environmental exposures and genetic susceptibilities can inform the development of targeted prevention intervention strategies.


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Abstract: The objective of this study was to estimate the prevalence of autistic spectrum disorder (ASD) and identify its clinical characterization, and medical conditions in a paediatric population in Portugal. A school survey was conducted in elementary schools, targeting 332 808 school-aged children in the mainland and 10 910 in the Azores islands. Referred children were directly assessed using the Diagnostic and Statistical Manual of Mental Disorders (4th edn), the Autism Diagnostic Interview–Revised, and the Childhood Autism Rating Scale. Clinical history and a laboratory investigation was performed. In parallel, a systematic multi-source search of children known to have autism was carried out in a restricted region. The global prevalence of ASD per 10 000 was 9.2 in mainland, and 15.6 in the Azores, with intriguing regional differences. A diversity of associated medical conditions was documented in 20%, with an unexpectedly high rate of mitochondrial respiratory chain disorders.

**Addendum 2**

Written by Dr. Jim Meehan, M.D

...I will no longer vaccinate my children...
...because I am a well trained medical doctor and former medical journal editor that has studied the vaccine research and analyzed both sides of the evidence.
...because I know how to read the medical literature, recognize bias and discern characteristics of good and fraudulent research.
...because I know that too much of the science supporting vaccines is fraudulent drivel bought and paid for by the vaccine manufacturers themselves.
...because I understand the risks of vaccination as well as the benefits of my children and grandchildren encountering and overcoming the wild type diseases naturally.
...because I know that diseases like mumps, measles, and chickenpox aren't dangerous and untreatable diseases that justify the risk of injecting toxic ingredients into the tissues of my children.
...because I have seen the evidence of neurotoxicity from ingredients like aluminum, polysorbate 80, human DNA and...
cellular residues from the human cells lines upon which many of the live viruses are grown.
...because I've seen vaccine manufacturers like Merck promote what they knew was bad medicine for profit, kill 60,000 patients with Vioxx, and I have no reason to believe that they wouldn't do the same thing with vaccines, especially when you consider they can't be sued when their vaccines maim or kill children.
...because I believe the vaccine industry has thoroughly corrupted the science and safety of vaccines.
...because I recognize the aggressive and unreasonable tactics of a multi-billion dollar pharmaceutical industry desperately working to maintain the illusion of vaccine safety, keep consumers consuming, grow their markets, and increase their profits.
...because I have met so many families whose children were stolen from them by the battery of vaccines administered at pediatric vaccine visits.
...because I believe the U.S. vaccination program has become a progressively dangerous assault on the health and lives of the children of America.
...because I am awake and aware, I will not vaccinate, nor will I remain silent as the pharmaceutical and medical industries pretends that vaccines are safe and effective..."